



# Does Autonomy Improve Satisfaction and Performance?

## A Case on Learner Choice

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### Abstract

Autonomy has been identified as an essential attribute of learner-centered teaching. Allowing learners some choice regarding their learning can positively impact motivation and performance. Some concepts can be illustrated more clearly through film, including agricultural leadership concepts such as the stages of small group development. In this study, we examined differences between learners given autonomy to choose a film for an analysis essay assignment and learners not given a choice. Learners in two sections of an agricultural leadership course focusing on teams and group development were taught the stages of group development. Learners analyzed the development of a team in film. Additionally, learners responded to questions regarding their satisfaction with and perceptions of the assignment. Findings revealed that learners in both sections perceived the assignment as enjoyable. Learners in both groups indicated a preference for their respective treatment in future similar assignments. Both groups performed well on the assignment. Recommendations include replicating this study with an additional measure of motivation, a standardized measure for student satisfaction with learning, and a larger sample size. Given that both groups of learners indicated satisfaction with learning, we recommend instructors consider incorporating films or other media when possible and appropriate.

**Keywords:** agricultural leadership; film; learner-centered teaching; teamwork; group development

Learner-centered teaching (LCT) can be described broadly as a pedagogical approach that focuses attention on the learner and learning processes rather than the subject matter or the teacher and teaching methods. Autonomy, or giving learners some control over learning processes, has been identified as an "essential attribute" of LCT (Oyelana et al., 2022, p. 4). The idea that autonomy impacts human motivation is supported by self-determination theory (SDT; Deci & Ryan, 1985). Moreover, research suggests that LCT and autonomy positively impact learner motivation and performance (Deci et al., 1991; Oyelana et al., 2022). Indeed, Brooks and Young (2011, p. 51) noted "offering students choices in a classroom may enhance their feelings of self-determination and intrinsic motivation to participate in class activities." Researchers have explored different means of providing choice, finding varying student outcomes (von Mizener & Williams, 2009). As educators make pedagogical decisions, it is important to understand what type and amount of choice may benefit learner motivation and result in desirable student outcomes, including enhanced academic performance.

### Self-Determination Theory

Self-determination theory (SDT) provides a way of understanding human motivation and personality (Deci & Ryan, 1985). Ryan and Deci (2020) posit that humans are naturally inclined to growth and integration, particularly around learning and connection to others. Through the lens of SDT, two types of motivation are differentiated. *Intrinsic*

*motivation* is one's motivation to do something out of interest, curiosity, or the desire to learn new skills, without the need for external rewards (Di Domenico & Ryan, 2017). *Extrinsic motivation* drives an individual to do something based on receiving a reward or avoiding a consequence (Di Domenico & Ryan, 2017). Deci and Ryan (2000) assert that people are motivated to make changes based on three needs: competence, relatedness, and autonomy. *Competence* speaks to an individual gaining necessary knowledge and skills to perform a task successfully, which will motivate them to act toward their goals. *Relatedness* refers to people's need to belong and be accepted by others. *Autonomy* is the need to feel in control of one's behaviors, which helps them meet their goals (Ryan & Deci, 2000a). SDT includes six mini theories to explain individual drivers for motivation. Organismic Integration Mini-Theory (OIT) explains learners' drivers and motivation as it relates to autonomy. Using OIT, researchers developed an autonomy continuum on which they believe every behavior can be placed (Sheldon & Prentice, 2019):

Once this location is known, much can be predicted about the way the person is likely to function as well as the outcomes he or she is likely to experience... Over time, motivations for particular behaviors tend to shift toward the autonomous end of the continuum. (p. 5).

In other words, autonomy, or feeling in control, can become increasingly important for some learners to perform certain behaviors.

### Autonomy and Choice-Based Learning

Some research indicates that autonomy and intrinsic motivation have positive impacts on learners' academic achievement and conceptual understanding (Oyelana et al., 2022). Similarly, effects of choice-based learning on learner outcomes have been explored, with much research indicating choice increases learner motivation (Arendt et al., 2016; Hanewicz et al., 2017; Lewis & Hayward, 2003; MacNaul et al., 2021; Schneider et al., 2018; von Mizener & Williams, 2009). However, performance outcomes are mixed, with some research indicating that choice enhances retention and transfer (Schneider et al., 2018; von Mizener et al., 2009) and other research finding no significant difference in performance between learners who received a choice and those who did not (MacNaul et al., 2021; von Mizener et al., 2009). Moreover, no studies investigating learner choice in agricultural leadership education were identified.

### Teaching with Film

Agricultural leadership education's purpose has been articulated as "to prepare future leaders to tackle societal issues related to food and the agricultural sciences" (Weeks & Weeks, 2020, p. 37). In recent decades, visual media has been established as an instructional tool in leadership education. Visual media, including film (or movies or motion pictures), has been found to effectively complement traditional methods of instruction such as assigned readings

and lectures (Comer, 2001; Hinck, et al., 1995), often leading to increased learner engagement and attention (Callahan & Rosser, 2007; McNeal et al., 2014). Movies have been used to teach leadership theories, constructs, practices, and related paradigms including the Situational Leadership Model, transformational/transactional leadership, toxic leadership, the bases of social power, group dynamics, and emotional intelligence among others (Edwards et al., 2015; Graham et al., 2004; Hannay & Venne, 2012; Rosser, 2007; Waller et al., 2013; Williams, 2006). Previous empirical work has focused on constructs such as the linkage of theory and practice (Ogston-Tuck, 2016), leadership life lessons and synthesis (Wimmer et al., 2012), and deductive versus inductive approaches to instruction (Lee & Lo, 2014). Nevertheless, it is important to note that much of the literature on using film to teach leadership is prescriptive, outlining best practices for use of film in a leadership class and providing suggestions of films with which to engage learners (Edwards et al., 2015; English & Steffy, 1997; Hannay & Venne, 2012; Sprinkle & Urick, 2016; Waller et al., 2013). This work is useful from a pedagogical and curricular design standpoint. However, a dearth of literature exists on the impact of learner choice of film. Similarly, while there was demonstrated interest and support for motion pictures and film strips as pedagogical tools useful for vocational agricultural instruction in the early and middle decades of the 20th Century (see Aspinwall, 1937; Klit, 1969), such research was limited and infrequent, not seeming to have been continued in the latter decades of the century.

To begin building a literature base in the areas of SDT, choice-based learning, and implications for learner motivation, satisfaction, and performance, particularly in the context of agricultural leadership education, this study sought to explore the impact of learner choice, namely choice of film, on learner perceptions, satisfaction, and performance on a film analysis essay assignment.

Our guiding question was: what are students' experiences with a self-determined film assignment in agricultural leadership coursework?

Specific research goals were to:

1. Determine learner satisfaction with a team in film analysis assignment,
2. Compare and contrast learner perceptions and performance when given a choice, and when not given a choice of film.

### Methods

The population for this study included all students enrolled in a team leadership course during Fall 2021 ( $n = 39$ ). The course is taught in the University of Florida's College of Agricultural and Life Sciences and is required for learners pursuing the Communication and Leadership Development specialization for a B.S. in Agricultural Education and Communication as well as for learners pursuing a leadership studies minor. Two sections of the course were taught by the same instructor. The stages of group development (Tuckman and Jensen, 1977) were taught via lecture during the third week of the semester. Tuckman and Jensen (1977)

characterized the stages small groups experience as they develop over the life span of the group, named forming, storming, norming, performing, and adjourning. Each stage consists of task- and interpersonal-related development. Forming is characterized by awkwardness, with group members getting to know each other as well as understand the purpose for which they are coming together. During the storming stage, members experience conflict as they assert and negotiate their desires regarding group processes, goals, and their role and responsibilities. In the norming stage, groups establish effective processes and becoming more efficient. Roles and relationships become established. As groups perform, they encounter limited conflict and are primarily focused on accomplishing their task, relying on their established processes. Finally, once the task had been accomplished, groups adjourn.

Following the lesson on the stages of group development, all learners were made aware of an essay assignment in which they would analyze the development of a team in film. One section was assigned a film to view in class, and therefore had no autonomy of choice (NC) ( $n_{NC} = 16$ ), while learners in the other section were given autonomy of choice (AC) to select their film individually and watch it outside of class ( $n_{AC} = 23$ ). Although not required, learners were encouraged to share the film they chose with the instructor to ensure its appropriateness for the assignment. Otherwise, learners relied on their understanding of the stages of group development to select a film appropriate for analysis.

In the weeks following the lesson on the stages of group development, learners worked in assigned teams to complete a team project. Subsequent lessons were designed to provide learners with knowledge and skills they could apply toward their own team's development. Learners in the NC section of the course watched *Jumanji: Welcome to the Jungle* in week 12. The instructor facilitated an in-class discussion on the team in film analysis in both course sections during week 12 and learners' essays were due during week 13. The discussion in both sections prompted learners to explain course concepts they identified in the film they viewed, beyond just the stages of development. Examples of those concepts were discussed in small groups, and then those groups subsequently shared summaries of their conversations with the whole class to encourage broader discussion about how leadership in teams was portrayed and carried out in the movie(s). Concepts highlighted by learners included team design, team member roles and responsibilities, conflict management, decision-making, team communication, and others. Moreover, learners were encouraged to consider their own experiences throughout the course and how they compared to the team they saw in their respective film.

In the analysis essay, learners were instructed to provide a brief introduction and descriptions of the stages of development, followed by their analysis of the development of the team in the chosen or assigned film. The primary component of the rubric was providing specific examples of scenes in the film that supported the learner's analysis and illustrated the various stages of development. Finally, they were to conclude with a concise synthesis of their

overall analysis of the team's development. As a required component of their assignment, all learners responded to 6 Likert-type and 4 open-ended, researcher-developed questions regarding their perceptions of and satisfaction with the assignment. All assignments were graded by teaching assistants for the respective sections, using the rubric prepared by the instructor and provided to the learners. Prior to grading, the instructor and both teaching assistants used the rubric to grade a paper, then shared and discussed their grades and comments to reconcile any differences and increase inter-rater reliability.

In accordance with university IRB-approved protocol, learners received informed consent regarding their opportunity to voluntarily participate in our study by allowing us to include data generated from their assignments in our analysis. Ten learners who did not choose their own film ( $n_{NC} = 10$ ) and 20 learners who did choose their own film ( $n_{AC} = 20$ ) agreed to participate. Prior to analysis, participant datasets were de-identified and randomized by one of the authors who was not associated with the class in an instructional capacity to ensure that datasets would be blinded to those authors who were involved in the instruction of the course through this process. To further control for bias or issues with blinded treatment, the course instructor was responsible for quantitative analysis, while an author not associated with the course was responsible for qualitative analysis. In this way, familiarity with students' turns of phrase or writing styles would be unrecognizable to a third party who had not previously been exposed to their writing in other course assignments.

This exploratory study utilized quantitative and qualitative data to address the research objectives. Means and frequencies were calculated for the Likert-type questions as well as learners' assignment grades. In addition, we conducted a thematic analysis to interpret the qualitative data. Braun and Clarke (2006, p. 79) define a thematic analysis as "a method for identifying, analyzing and reporting patterns (themes) within data." We facilitated an inductive approach when analyzing data beginning with an open coding cycle, during which we assigned descriptive codes to segments of the participants' responses to open-ended questions (Saldaña, 2021; Saldaña & Omasta, 2022). While constant comparative method as a formal technique is inextricably linked to grounded theory (Glaser & Strauss, 1967), Braun and Clarke (2020) noted that all qualitative works in the broadest sense employ some type of comparative analysis to properly analyze, code, and understand datasets. In this spirit, as descriptive codes were initially assigned and their categories evolved, we endeavored to compare data segments to ensure consistency and understanding regarding the participants' lived experience with choice in this research context and any of the emotions and cognitions therein. We believe that this helped to best identify emergent themes as we condensed the descriptive codes into concept codes (Saldaña, 2021).

## Results and Discussion

Overall, learners in both the NC and AC sections performed well on the assignment (MAC = 98.55%, MNC = 96.35%). Learners accurately explained the stages of groups development and provided appropriate examples to illustrate and support their analysis of the team in film. The first three Likert-type questions assessed learners' perceptions on a 7-point scale, where 1 indicated "extremely difficult" while 7 indicated "extremely easy." The remaining three questions assessed learners' agreement with statements, where 1 indicated "strongly disagree" and 7 indicated "strongly agree" (Table 1). Additionally, the language of the questions reflected the section each learner was enrolled in, thus, learners who did not receive autonomy of choice were asked their perceptions and preferences regarding not having a choice and learners who had autonomy to choose their film were asked their perceptions and preferences regarding that autonomy.

Notably, three NC learners indicated they would have preferred choosing their own film, though only one of those perceived not being able to choose their film as "difficult." Interestingly, six AC learners indicated that choosing a film was difficult; however, only two of those and one who did not find it difficult to choose reported a preference for the film to be chosen for them.

## Initial Reaction to Choice

The first open-ended question inquired about participants' initial sentiment toward the film assignment, particularly their autonomy, or lack thereof, to choose a film. Most reactions among the two groups, autonomy of choice (AC) and no choice (NC), were generally enthusiastic; namely, there was a positive response for both choice and no choice across the two groups (Table 2). For the AC group, most participants responded with words such as "excited" or "excitement." This excitement seemed to result from being allowed to pick films with which they were already familiar or had previously enjoyed, thus allowing them to better engage in the assignment or have more fun with it. For the NC group, responses were more varied and included words

such as "relief," "confident," and "content." Despite the variance, in all cases, participant sentiment derived from the structure inherent in having a movie selected for them and not having to worry about choosing a film that might not exhibit the stages of group development.

A second theme for initial reactions to the autonomy of choice or lack thereof was "displeasure" (Table 3). Participants in the AC group used words such as "difficult," "overwhelmed," and "weird." Learners indicated apprehension over choosing a film appropriate for the tasks of the assignment or narrowing down a film from the proverbial cinematic library. For the NC group, displeasure came from concern that the film in-question would be boring. This was best expressed by Participant R who noted "At first, I was concerned that the film that was chosen was going to be really boring and hard to watch."

In addition to the binary themes of enthusiasm and displeasure, there is a third theme, "transitional," that coalesced from data analysis (Table 4). For the AC group, two examples arose where one participant was initially overwhelmed by the prospect of selecting a film while the other was "not super thrilled" by it because they were not a film fanatic. Nevertheless, once the participants settled on a film that they were comfortable with, they were then excited about the assignment. There was no evidence of transitional sentiment for the NC group.

## Approach to the Assignment

The second open-ended question sought to understand learners' approach to the assignment. Data generated a central theme of "active notetaking" across the two groups (Table 5). However, several iterations of notetaking were identified, resulting in subthemes: "pre-film reflection," "post-film reflection," and "general notetaking and recall." Pre-film reflections could include a review of the group development material and/or anticipating where said material might arise in the film. Post-film reflections generally revolved around revisiting parts of the film plot that seemed pertinent to the stages of group development and/or a general review of the film in the participants' mind's eye to summarize what they saw with respect to the stages. General notetaking and recall approaches seemed to rely on referring to notes to

Table 1

*Learners' Perceptions of the Analysis of Teamn in Film Assignment*

Item	AC Mean (SD)	NC Mean (SD)
Writing this paper on the stages of group development was ____.	5.55 (1.19)	5.9 (0.88)
Applying my understanding of the stages of group development to a team in film was ____.	5.6 (0.99)	6.0 (0.67)
Choosing a film to analyze (AC)/NOT getting to choose the film (NC) was ____.	5.3 (1.95)	5.6 (1.07)
I would have preferred a film been chosen for me. (AC)/I would have preferred choosing <u>my</u> own film (NC).	2.55 (1.88)	3.2 (1.99)
I enjoyed this assignment	6.0 (1.38)	5.7 (1.34)
I would have preferred a different assignment to assess my understanding of the concept.	2.3 (1.30)	2.3 (1.06)

Note. 1 = extremely difficult/stongly disagree, 7 = extremely easy/strongly agree

inform the participant's assignment (without any formal pre- or post-film reflection), although reflection might have taken place during the movie while taking the notes.

Two strategies did not fall into the subthemes under active notetaking. In one case, a participant watched the movie and then read the plot online before engaging in their assignment. It is unclear whether they took notes. In another case, the participant did take notes but engaged

in active reflection during transition scenes to inform their assignment.

#### Previous Experience

The third open-ended question ascertained whether participants had previously engaged in an assignment where they had to analyze leadership concepts in a film. Of

**Table 2**

*Initial Positive Reactions to Film Assignment*

Group	Participant	Theme	Example Quote
AC	Theta	Enthusiasm	"My initial reaction to the freedom of selecting my own film for this assignment was excitement. Not only was I more able to select a film which I felt was easier to analyze, but I was excited that this selection would be a film which I definitely enjoy."
AC	Chi	Enthusiasm	"I was excited to choose the film myself so I could choose one that I was familiar with. This helped me notice things that I hadn't when I first watched the movie."
AC	Tau	Enthusiasm	"I liked being able to pick a film myself because I often watch a movie twice when writing about it, so picking one I enjoyed made the assignment easier."
AC	Iota	Enthusiasm	"I enjoyed being able to choose my own film. It allowed me to spend time watching something that I'd enjoy analyzing, since this is something I tend to do in my free time anyways."
NC	Q	Enthusiasm	"My initial reaction to not getting to choose the film for my analysis was relief. I thought I was going to have to choose a film for this assignment and I didn't know any films that work for showing the stages of team development."
NC	U	Enthusiasm	"I was completely confidence [confident] in the professor to be able to provide a movie that properly showed the stages of group development. I also can be super indecisive when it comes to picking a movie. By having it chosen for me, I was at ease in knowing that the movie was going to depict all the stages."
NC	X	Enthusiasm	"I was okay with it, especially when I saw that the film we were watching was Jumanji. This is because Jumanji is a funny and easy to understand film. Perhaps if the movie was older, harder to understand, or less entertaining then I would have been more upset we didn't get to choose. Though, having the freedom to choose a film sounds fun. I feel I could have gotten overwhelmed and ultimately had issues deciding on a film. I was content having the material and instructions already decided for us."

**Table 3**

*Initial Negative Reactions to Film Assignment*

Group	Participant	Theme	Example Quote
AC	Rho	Displeasure	"My initial reaction was that I had so many ideas and found it difficult to narrow it down to just one film."
AC	Upsilon	Displeasure	"My initial reaction to getting to choose the film was slightly overwhelmed due to the number of options there were. Being able to choose the movie was good because I could choose from a streaming platform, I had but trying to find the best movie for this assignment was difficult."
AC	Psi	Displeasure	"Being able to have the autonomy to choose the movie was weird for me since most similar assignments I have had in other classes had the topic chosen for me. I'm used to teachers assigning a specific movie, book, etc. for assignments instead of letting us choose."

the total study participants, 63% had not completed a similar assignment before. 50% of participants in the NC group had not completed an assignment such as this before. For the AC group, 70% of participants had not completed a similar assignment. Beyond this, additional insight was garnered from this question that was not previously anticipated (Table 6). Numerous participants provided a summary comment of their experience with the assignment that warranted record.

Regardless of group, participants expressed enjoyment with the assignment. However, a few learners were less than enthusiastic about their experience with the assignment.

One participant noted that the experience was weird for them, having never thought about leadership in film before despite using film for other types of analyses. Another noted that shorter examples are equally as effective and less time-consuming than a feature film.

#### Future Preference

The final open-ended question determined whether participants would like to choose their film or be assigned one for a similar, future assignment. 70% of participants in

**Table 4**

*Negative-to-Positive Reactions to the Film Assignment*

Group	Participant	Theme	Example Quote
AC	Sigma	Transitional	"At first it seemed a little overwhelming, but once I thought of a team, I was super excited to choose my own film. I wanted to choose something off the wall."
AC	Phi	Transitional	"At first, I was not super thrilled because I am not the biggest movie watcher, so I was nervous about finding a movie that would fit the assignment. However, once I selected my movie, I was really excited about it, since I picked a movie that I enjoyed and was excited to watch."

**Table 5**

*Active Notetaking Iterations for Film Assignment*

Group	Participant	Subtheme	Example Quote
AC	Psi	Pre-film reflection	"Since it was a movie I had seen before, I started thinking about team development before watching the movie again. This allowed me to make better notes as I watched the movie, because I knew what scenes could possibly showcase the different stages. I was able to have a better idea of what evidence I wanted to use in my essay so I could pay closer attention to those parts."
AC	Chi	Pre-film reflection	"I started thinking about team development in the movie before watching it so I could look out for it when watching the movie."
AC	Kappa	Post-film Reflection	"I waited until I had finished watching the film so that I could fully take in the plot and dynamic of the characters and team being analyzed."
NC	Q	Post-film Reflection	"To approach the assignment, I thought about team development during the movie. During each scene I would try to see if how the team interacted fit the criteria for any of the stages of development, storming, norming, forming, performing, or adjourning. If I found a certain scene exemplifying one of these stages, I would take note of it and write a short explanation of how it related to the stage. Then after the film was over, I tried to reflect on the film to see if anything else in the film fit the stages of team development."
AC	Phi	General Notetaking and Recall	"I personally thought about team development throughout the whole movie. I had my laptop open and was taking notes throughout on the scenes that worked for the different stages of team development, different team processes, and other team concepts that were involved throughout the film. I felt as though this really allowed me to be actively thinking about the stages of team development and really notice which scenes fell into which category, rather than had I waited to reflect. I think that had I waited until after the movie I would have missed some key concepts that I realized during the film."
NC	W	General Notetaking and Recall	"As the movie played, I actively took notes under headings of each stage in team development. I made note of specific scenes and actions that I could utilize in my paper. As I watched the film, I consciously watched for instances that fell into the Tuckman model."

Table 6

*Initial Negative Reactions to Film Assignment*

Participant	Example Quote
Y	"I have not completed an assignment like this before. I thought it would be difficult, but it became quite easy and fun. I am grateful that I was able to watch the movie in class. I retain information better in the classroom. Knowing what concepts I had to look out for helped me pay great attention to the film."
W	"I have not completed an assignment like this. I enjoyed this experience because it combined a comedic-action movie with concepts learned in the class. It is a fun way to apply knowledge I have gained from the course. Other experiences were less creative and more textbook centered."
Pi	"Yes, in another leadership class I was assigned a paper in which the class watched a documentary on water rights and then was tasked with relating the concepts discussed to global leadership. I think film shows you how important leadership in teams is because you see relevant concepts playing out in front of you. Unlike team leadership in real life, it is easier to step back and see the big picture because you have nothing at stake."

Table 7

*Film Assignment Resulting in Less Stress*

Group	Participant	Example Quote
NC	Q	"As long as a good movie was chosen, I wouldn't mind being assigned a film to watch. Not having to choose my own film takes a certain level of stress away from the assignment as, since you the professor chose the movie, I know for sure that the team in the movie will be going through the stages of team development and that I will have a substantial amount of evidence to use for my essay."
NC	U	"I like that it was chosen for me because I did not have to stress about finding the perfect movie for the assignment and I was able to focus more on completing the assignment and analyzing the movie."

the NC group indicated that they would prefer to be assigned the film, while 90% of the twenty AC group participants indicated that they would prefer to choose their own film. For the NC group, there were not enough salient sentiments to generate a true theme. Indeed, some participants were not clear on why they wanted to be assigned a film. However, a few statements seem to indicate that film assignment is less stressful than having to pick a film (Table 7).

For the AC group, overwhelmingly, participant sentiments coalesced into a theme of autonomy of choice being better for analyzing the stages of group development. Some participants framed this from the perspective that choosing the film made the assignment more fun and interesting, while others noted that film choice made them feel more comfortable with the scope of the assignment. Finally, autonomy of choice resulted in an additional theme where participants simply found that this assignment structure took away any associated negativity with the assignment, providing students with a more positive outlook (Table 8).

### Summary

Overall, learners performed well on the assignment, regardless of whether they were able to choose the film they analyzed. This aligns with previous research that found no significant differences in student performance between those receiving a choice in assignment and those

who did not (Baldwin et al., 1991; MacNaul et al., 2021; von Mizener et al., 2009). Additionally, learners characterized the assignment as easy and enjoyable. Neither group indicated they would have preferred a different assignment to assess their understanding of the stages of group development. Moreover, while the NC learners reported slightly less disagreement, learners in both groups indicated a preference for the treatment they received, whether choice or no choice of film. Qualitative findings suggested that learners who experienced choice were excited and enthusiastic about choosing the film, while learners who did not experience choice simply appreciated the convenience and lack of stress or responsibility associated with selecting an appropriate film. Statements suggest that AC learners experienced more intrinsic motivation to complete the assignment while NC learners experienced more extrinsic motivation, aligning with self-determination theory (Ryan & Deci, 2000b).

Our study holds implications for both research and practice. For research, we recommend the study be replicated, employing an additional measure of motivation, for example the Intrinsic Motivation Inventory (IMI) (Center for Self-Determination Theory, n.d.). Furthermore, another learner satisfaction instrument, one which has been validated by previous research, is recommended in future studies of this nature. While the instrument used for this study was functional, more insights on learner satisfaction could be gleaned from a more robust instrument. Items

**Table 8***Choice of Film Being Fun and Interesting and Resulting in a Positive Outlook*

Group	Participant	Theme	Example Quote
AC	Iota	Fun and Interesting	"I would prefer to choose my own film. This helped with keeping our attention in this assignment as we could choose a film that we enjoyed. If I had to watch a film that I wasn't interested in, I don't think I'd get as much out of this assignment in terms of learning about group development."
AC	Pi	Fun and Interesting	"I would rather choose my own film. If everyone had the same film assigned it would be repetitive and there would be less examples of how team leadership can play out. While it took me some time to decide on what movie to use, I think writing a paper about something I wanted to watch helped me better analyze the stages of team [group] development."
AC	Theta	Fun and Interesting	"I strongly believe that students should remain with the freedom to select their own film. Not only does it allow for more variety which can be potentially shared with the class as new perspective, but it allows for open-ended thinking. When given the opportunity to select my own film, I was required to reflect upon my own experiences and think a little harder about what team [group] development means to me."
AC	Alpha	Positive Outlook	"I would prefer to choose my own film because it made me excited to do the assignment. Choosing the film did not make me dread having to write a paper."
	Kappa	Post-film Reflection	"I waited until I had finished watching the film so that I could fully take in the plot and dynamic of the characters and team being analyzed."
AC	Delta	Positive Outlook	"I would prefer to choose my own film because it makes it more interesting and fun to write about. It's weird to say it, but I thoroughly enjoyed writing this paper and being able to look back at scenes from one of my favorite movies. It was very difficult for me to stop myself from writing more because of how many scenes I believe perfectly applied to the stages. I'm sorry but I had to include links to the best scenes!"
AC	Lambda	Positive Outlook	"I would prefer to choose my own film because I think when you are given a film, you are less likely to want to watch it and you think of it more as an assignment you are given but when we are given the freedom to choose something we like to watch or something we want to watch, it makes it more fun and feel less like work."

adapted from the Student Satisfaction and Self-confidence in Learning Scale (SSSLS) might be appropriate to gauge learner satisfaction (National League for Nursing, 2005). Qualitative exploration should continue to investigate learners' perceptions of choice-based learning and how they approach autonomy of choice in the classroom. In general, it is important to understand what types of choice and how much choice results in positive student outcomes and if there is a point of diminishing returns. To that end, follow-up focus groups could be conducted with participants in subsequent studies to provide further context for their experiences and to complement the findings from their written responses to the free-response questions. We are mindful that film does not have a place in every course and there are innumerable options for incorporating learner choice across the wide range of agricultural courses and content. Therefore, we recommend that future research consider the impacts of different types of learner choice that can be offered. For example, exploring learners' satisfaction and motivation when allowed to select from different types of assignments that achieve or demonstrate the same learning objectives but allow learners to more fully utilize their strengths and

creativity.

In this study, learners enjoyed learning through film, regardless of whether they chose the film or not. As a matter of practice, we recommend agriculture educators consider incorporating film when they can, as a learner-centered pedagogy. Given our findings regarding choice, we recommend instructors consider the availability and ease of accessibility of film selection for the concept they wish to illustrate. Certainly, some concepts in agriculture might provide a wide array of pertinent media to select from while other concepts may have a much more limited library. Fortunately, in our study, choice or lack thereof did not seem to impact learner performance given that the grades earned by learners in both sections were generally high. Finally, beyond teaching with film, it may be useful for instructors to consider other opportunities to provide choice to learners as a learner-centered teaching approach.



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