

Integrative Complexity, Horror, and Gender: A Linguistic Case Study of *Until Dawn*

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Abstract

The present study examines the relationship between integrative complexity and gender in the horror video game *Until Dawn* (Supermassive Games, 2015). By comparing a random sample of dialogue from the playable female and male characters, this study explores structural nuances and linguistic differences in how the characters are written, valued, and emphasized in the game's narrative. The results show that the female characters consistently scored significantly lower than the male characters in terms of integrative complexity. These findings may be explained by the male characters being main sources of conflict within the game and having greater degrees of agency. They also provide further support to the idea that female characters are often devalued and deemphasized—made secondary to their male counterparts—in horror narratives.

Keywords

Horror; narrative; gender; integrative complexity; *Until Dawn*.



Introduction

McCullough (2019a) explored the relationship between gender and integrative complexity—a linguistic variable and psychological construct (Conway et al., 2001)—in the context of horror films, and found that in critically acclaimed (i.e., rated as “Fresh” according to the review-aggregation website Rotten Tomatoes) horror films, female characters scored significantly lower than male characters in terms of integrative complexity. This suggests that female characters are “devalued or seen as immaterial within these narratives” (McCullough, 2019a, p. 7). The present study expands upon McCullough (2019a) by analysing the relationship between gender and integrative complexity within the context of horror video games. More specifically, it compares the integrative complexity levels of the playable female and male characters in *Until Dawn* (2015), a critically acclaimed horror video game developed by Supermassive Games.

Understanding and Defining Gender

When analysing fictional characters, it is necessary and vital for researchers to understand and acknowledge the distinction between biological or assigned sex and gender identity. According to Buck (2016),

gender identity is the personal psychological experience of one’s own gender, and . . . it might at times be overlooked by cisgender men and women. One possible explanation for this could be that for cisgender people, assigned sex and gender identity could conceivably serve as proxy terms. Without a personal discrepancy to help practically distinguish the two constructs, making an abstract conceptual distinction between them might not be intuitive. (p. 466)

Furthermore, “gender identity is by definition internal, it is only discernible to the extent that is explicitly disclosed or reflected by an individual’s gender expression” (Buck, 2016, p. 466).

Within most fictional works (video games included), the biological sex of a character is rarely disclosed to the audience. What the audience often perceives is the gender expression of the characters (i.e., their lived identities). It would be cisnormative to assume that all lived identities align with those of assigned sex, especially in the context of fiction and video games. It would discount the fluid nature of gender as a concept, and more importantly, it would discount the real, lived experiences of many individuals. As such, throughout this article, I use the term gender (not sex) to describe the distinction between male and female characters. This prioritizes the identities expressed by the characters within their own narrative over (possibly) incorrect assumptions of biological sex. It is also important to note that gender is not binary. It is not strictly exclusive to male or female expressions and identities.

Gender exists on a vibrant, multidimensional spectrum and includes a plethora of diverse, unique, and fluid identities.

Unfortunately, in the horror genre (and in mainstream media in general), character depictions that do not conform with the male and female sections of the gender spectrum are incredibly rare—some to the point of nonexistence. In this regard, the horror genre needs a firm separation from antiquated cisnormative thinking and greater diversity in the expression of gender identity. The present research works within the current limitations of horror's depiction of gender. Once a greater diversity of gender identities and greater representation is achieved, this study should be reconducted with those gender identities represented.

Until Dawn: A Brief Overview

Until Dawn is an interactive drama and horror video game. The game follows eight playable characters (Sam, Ashley, Emily, Jessica, Mike, Matt, Chris, and Josh), who visit Blackwood Mountain for an annual winter getaway. The year prior, many of the characters played a cruel prank on Josh's sister, Hannah, humiliating her and resulting in her and her twin, Beth, leaving the winter lodge and disappearing in the woods. This prank and subsequent disappearance act as the inciting incident for the primary and secondary conflicts of the game.

The game is built around the concept of the "butterfly effect" (see Figure 1) and the choices players make determine which characters survive or die. Players are alerted precisely when they make a decision that alters the course of the narrative. According to Tavinor (2017), "some of the butterfly effects in the game are rather distant from their initiating actions, and a decision made much earlier in the game can have a surprising effect later on. As a result, it is often a puzzle to understand the causal structure of the game's narrative algorithm" (p. 26).



Figure 1. Example of *Until Dawn's* butterfly effect game mechanic. Screenshot by the author.

During the first part of the game, Josh stages complex traps to torment his friends and get revenge for his sisters. Despite their appearance, none of the traps are lethal; however, the traps cause trauma in the characters that lingers throughout the game. Eventually, it is revealed that the primary threat in the game are the wendigos—transformed, monstrous humans with cannibalistic impulses—that hunt the characters. Moreover, it is revealed that the main, most powerful wendigo is a transformed Hannah, having been forced to consume Beth after losing her way in the mines underneath Blackwood Mountain.

It makes particular sense to use *Until Dawn* as a starting point for expanding the research on gender, horror, and integrative complexity started in McCullough (2019a) into the context of video games. Not all research that is conducted in the context of film is applicable to video games. According to Veale (2012), “it is [the] key difference in engagement which is why film and games are conceptually difficult to bridge” (para. 6). However, *Until Dawn* draws heavily from film in its execution, both in terms of its B-movie inspiration and its “cinematic drive and direction” (Fassone et al., 2015, p. 7).

Theoretical Framework

What is Integrative Complexity?

Definition and Subtypes

Instead of analysing a text’s content, integrative complexity assesses the cognitive structure of a text. Cognitive structure is defined in terms of the absence or presence of differentiation and integration: “differentiation refers to a variety of aspects or components of an issue that a person recognizes” (Tetlock, 1986, p. 819), and “integration refers to the development of conceptual connections among differentiated characteristics” (Tetlock, 1986, p. 819). A complex speaker recognizes the diverse perspectives of a topic while also meaningfully explaining their connections. A simplistic speaker, on the other hand, does neither (McCullough, 2019a; Wasike, 2017). Because it analyses structure, integrative complexity is applicable to any verbal material, whether it be written or oral (Suedfeld, 2010), with some exceptions (see Baker-Brown et al., 1992 for more details).

Low levels of integrative complexity are marked by “‘black-or-white’ thinking, all-or-nothing judgments, possessing a general inability or unwillingness to accept uncertainty and divergent viewpoints, and a desire for rapid closure” (Thoemmes & Conway, 2007, p. 195). On the other hand, high levels of integrative complexity are characterized by “a high acceptance of uncertainty, ability to synthesize opposing viewpoints, or multidimensional integration of opinions” (p. 195). It is important to note that the variable is not concerned with evincing the moral, logical, pragmatic, or ethical superiority of any specific belief or value system, opinion, or thought: “Any belief or thought might be

expressed at any level of complexity, and conversely, opposing ideas can be expressed at the same level” (Suedfeld, 2010, p. 1671). Instead, integrative complexity focuses on scrutinizing how something is said as opposed to what is being said (Baker-Brown et al., 1992), and its levels are shaped by internal and external factors jointly (Suedfeld, 2010).

Integrative complexity can be divided into two subtypes: (1) dialectical complexity, which describes when a single topic is explored broadly and from various, dissimilar perspectives; and (2) elaborative complexity, which arises when an individual topic or theme is discussed in a complex manner (McCullough & Conway, 2018a, p. 393). “Markers of ambiguity, uncertainty, or a willingness to see multiple perspectives as valid (even if competing)” (Conway et al., 2014, p. 605) indicate dialectical complexity, while elaborative complexity’s indicators include “a specific viewpoint, multiple dimensions offered without qualification, and several complex arguments in defence of a particular perspective” (p. 605). Often, high levels of dialectical complexity are paired with low levels of elaborative complexity, and vice versa (McCullough, 2020); however, it is possible—if not necessary—for high (or low) levels of dialectical complexity and elaborative complexity to occur simultaneously within a single text (Conway et al., 2008).

Integrative Complexity, Pop Culture, and the Value Pluralism Model

Integrative complexity was originally conceptualized by political psychologists; for this reason, the majority of previous integrative complexity research has focused on topics related to politics.¹ Recently, the variable has seen greater application in the study of pop culture and media (e.g., McCullough & Conway, 2018a; McCullough & Conway, 2018b; McCullough, 2020; Robertson et al., 2019), including video games specifically (McCullough, 2019b; McCullough, 2019c). Because it can detect linguistic nuances on the character-level, plot-level, and thematic-level of a story (McCullough, 2020), integrative complexity creates an opportunity to explore the structural nuances, cultural implications, and underlying psychology of fiction and storytelling (McCullough & Conway, 2018b).

A cornerstone of integrative complexity research is the value pluralism model (Tetlock, 1986), which explains how higher levels of integrative complexity are induced: “When conflicting values are of approximately equal strength, denial and bolstering are no longer plausible solutions to trade-off dilemmas . . . people must turn to more effort-demanding

¹ For example, integrative complexity has been used to study terrorism (e.g., Conway & Conway, 2011; Smith et al., 2008), elections (Conway et al., 2012), international conflicts (e.g., Conway et al., 2003; Conway et al., 2001), political ideologies (e.g., Gruenfeld, 1995; Houck & Conway, 2019; Jost et al., 2003; McCullough & Kalsher, 2019; Suedfeld & Epstein, 1973; Tetlock, 1984), attitude formation (e.g., Conway et al., 2008; Conway et al., 2011; Tetlock, 1986), and political leadership (e.g., Ballard, 1983; Thoemmes & Conway, 2007; Wasike, 2017).

strategies such as differentiation . . . and integration” (p. 820). Higher levels of integrative complexity are induced when core beliefs and values come into conflict and the resulting dissonance is contended with.

The value pluralism model is particularly important to integrative complexity research that focuses on storytelling because “unlike real people, fictional characters are crafted and created. Their core beliefs are determined and provided initially by their authors and writers, their creators” (McCullough, 2019a, p. 2). Because people use stories and media to question their values, beliefs, and feelings, and to derive meaning in their lives (Dill-Shackleford et al., 2016) and because integrative complexity provides insight into more implicit, behind-the-scenes aspects of human psychology and culture that are not necessarily influenced by overt factors (Conway et al., 2014), the integrative complexity levels of fictional characters can provide insight into not only narratological needs and genre customs, but also into the greater cultural and societal implications of storytelling trends and individual stories.

Why Use Integrative Complexity to Study Horror Video Games?

Integrative complexity has previously been applied to the study of video games: McCullough (2019b) analysed linguistic nuances across video game genres and McCullough (2019c) tested integrative complexity’s ability to predict outcomes at video game awards. The present study is (to my knowledge) the first to use integrative complexity to study horror video games specifically. Pop culture as a whole, and video games specifically, remain novel areas of application for integrative complexity, but there is ample justification to believe integrative complexity is insightful into the psychology of horror video games.

In horror, values and intent are rarely conveyed overtly (Brummett, 2013); instead, they are communicated through story and narrative structure. Horror video games specifically rely on restrictive narrative structure to induce suspense and fear (Griffin, 2019). Because integrative complexity assesses structure, it “provides a unique indicator of psychological processes that are not necessarily influenced by overt factors” (McCullough & Conway, 2018b, p. 519); thus, it appears that integrative complexity is of particular relevance to the study of horror video games.

Moreover, previous research spotlights linguistic analysis’s insightfulness into the underlying psychology of both the horror genre and video games. In terms of horror research, for example, Susinskiene and Jurkoniene (2010) analysed the manifestations of grammatical metaphors in the horror genre, whereas Webb and Rodgers (2009) assessed the necessary vocabulary needed to understand horror and other genres. In the context of game studies, Purnomo et al. (2016) used ludic linguistics to examine the patterns and preferences in three narrative-driven games, and Copeland (2017) evaluated the specialized

languages utilized in fantasy role-playing games (RPGs). Particularly notable, Dwulecki and Khaledi (2017) analysed the rhetoric of *Until Dawn* specifically. Collectively, these pieces of previous research justify integrative complexity's application in the present study.

Horror, Gender, and Integrative Complexity: Expectations and Hypothesis

A prominent interpretation of the horror genre is that horror is "indicative of an antifeminist agenda" (Christensen, 2016, p. 29). Sharrett (1996) argued that horror films predominantly feature narratives that are "explicitly about the destruction of women" (p. 254) because female characters in horror stories do not function like actual characters or "real" people. The female characters are merely objects that inhabit the worlds of horror with the sole purpose of being "raped, stabbed, chopped at, and strangled" (Logas, 1981, p. 21).

Similar observations are also applicable to horror video games. Stang (2018), for instance, discussed issues surrounding the monstrous-feminine in video games, explaining how the many depictions of the monstrous-feminine indicate a long popular culture tradition that frames the empowered female body as both threatening and monstrous. This discourse contributes to the marginalization of women within patriarchal society. Similarly, Labre and Duke (2004) discussed how the *Buffy the Vampire Slayer* tie-in video game (The Collective, 2002) strips video game Buffy of her television series counterpart's complexity and depth, reducing her to a one-dimensional construct with exaggerated sexual characteristics.

Following this interpretation of horror, it is reasonable to assume that female characters in horror video games display low levels of integrative complexity. If their only purpose is to die horribly, then female characters are likely underdeveloped, lacking the "loves, hates, self-doubts, recreations, yearning, and so forth that are so common to the human condition" (McCullough & Conway, 2018b, p. 520) and lacking the conceptual nuance necessary for higher levels of integrative complexity. Thus, the female characters would not "possess the multiple core values needed to induce higher levels of integrative complexity as explained by the value pluralism model" (McCullough, 2019a, p. 6). As such, the present study functions under the hypothesis that the female characters in *Until Dawn* will score lower than the male characters in terms of integrative complexity, dialectical complexity, and elaborative complexity.

However, there are other academic interpretations of horror that characterize the genre as having feminist potential. For example, Kelly (2016) asserted the feminist potential of horror, arguing the genre provides "radical opportunities to reenvision gender politics of spectatorship, locating new ways to challenge the subjugation of women

on- and off-screen” (p. 102). Similarly, Pulliam (2014) argued that “monsters are a girl’s best friend” (p. 178) because, while monsters in horror may emphasize the socialization of gender roles, they also represent methods for young girls and women to establish an active sense of agency and independence in society. According to these scholars, female characters in horror appear to be intertwined with conflict and nuance across narrative levels (thematic, personal, etc.). Thus, while the present study functions under the aforementioned hypothesis, it acknowledges that the female characters in *Until Dawn* may score higher in terms of integrative complexity than the male characters.

Methods

Data Collection

A total of eighty pieces of dialogue were randomly sampled from *Until Dawn*’s four playable female characters (Sam, Jessica, Emily, and Ashley)² and from the four playable male characters (Chris, Josh, Matt, and Mike). The dialogue was equally divided amongst the characters of each group, meaning that twenty pieces of dialogue were sampled from each character—a number that follows the standards of integrative complexity research (Baker-Brown et al., 1992) and reflects sample sizes from other studies that analysed integrative complexity in pop cultural contexts (e.g., McCullough & Conway, 2018b; McCullough, 2019a; McCullough, 2019d).

The random selection was accomplished via an online random number generator (<https://www.random.org/integers/>): All eligible pieces of dialogue were assigned a number and the generator made the final determination. To be considered eligible for inclusion in this study, dialogue needed to be (1) at least two sentences in length (to eliminate overly short pieces of dialogue), and (2) no longer than a paragraph as defined by grammatical and stylistic conventions (to eliminate overly long pieces of dialogue).

It is important to note that *Until Dawn*’s utilization of the butterfly effect means that depending on the choices the player makes, certain scenes and dialogue options may or may not occur in an individual playthrough. For example, if Jessica dies in Chapter 4, her trek through the mines later in the game does not occur. All the eligible dialogue across the various story branches was considered for inclusion in this study.

² Technically, there is a fifth playable female character: Beth. She was excluded from this study for two reasons: (1) She only features in the game’s prologue/tutorial; and (2) a substantial portion of her dialogue is made of single sentences and single word utterances, which overall limits the amount of available, eligible dialogue. These differences between Beth’s dialogue and the dialogue of the other characters may skew or confound the results.

AutoIC (Automated Integrative Complexity)

Integrative complexity is scored on a scale of 1 to 7. According to Tadmor et al. (2012),

1 reflects the absence of both differentiation and integration, 3 indicates the presence of differentiation but the absence of integration, 5 reflects the presence of both differentiation and integration, and 7 indicates differentiation as well as the specification of higher order integrative principles. Even numbers (i.e., 2, 4, and 6) are assigned as transitional scores when a response implies the next high level of complexity but does not explicitly meet the scoring criteria for that level. (p. 525)

Once the data collection process was completed, the pieces of dialogue were scored for integrative complexity, dialectical complexity, and elaborative complexity using AutoIC (Automated Integrative Complexity). An automated scoring program that was originally conceptualized by Suedfeld et al. (1997), AutoIC was designed by integrative complexity researchers (Conway et al., 2014; Houck et al., 2014) and is publicly available (<http://www.autoic.org/>). Traditionally, the scoring process for integrative complexity has been accomplished by certified and trained coders (Baker-Brown et al., 1992); however, the process of preparing the datasets for coders (anonymizing, organizing, etc.) and of scoring can be both time-consuming and difficult. AutoIC greatly compensates for this weakness, reducing the time it takes to process and score data exponentially (Conway et al., 2014).

AutoIC uses the same guidelines and logics as human coders (see Baker-Brown et al., 1992). It assigns scores based on the probability of certain phrases and words appearing in a complex passage:

Words/phrases are weighted according to the probability that they would indicate complexity. Some words/phrases are so frequently indicators of complexity, and have few or no low-complexity uses, that even one mention of them deserves full differentiation (e.g., “on the other hand”). Some words/phrases indicate complexity, but they often also indicate something else that is not complex at all—and these words/phrases get lower scores as a result. The exact score is based on the estimated ratio of complex to noncomplex usage. (Conway et al., 2014, pp. 614–615)

Furthermore, AutoIC displays substantially higher computer-to-human reliability scores than similar coding programs (Conway et al., 2014; Houck et al., 2014) and has been used in previous pop culture and media research (e.g., McCullough, 2020; McCullough & Conway, 2018a; McCullough & Conway, 2018b; McCullough, 2020; Robertson et al., 2019). It has also been used specifically within the context of video game research (e.g., McCullough, 2019b; McCullough, 2019c).

Results

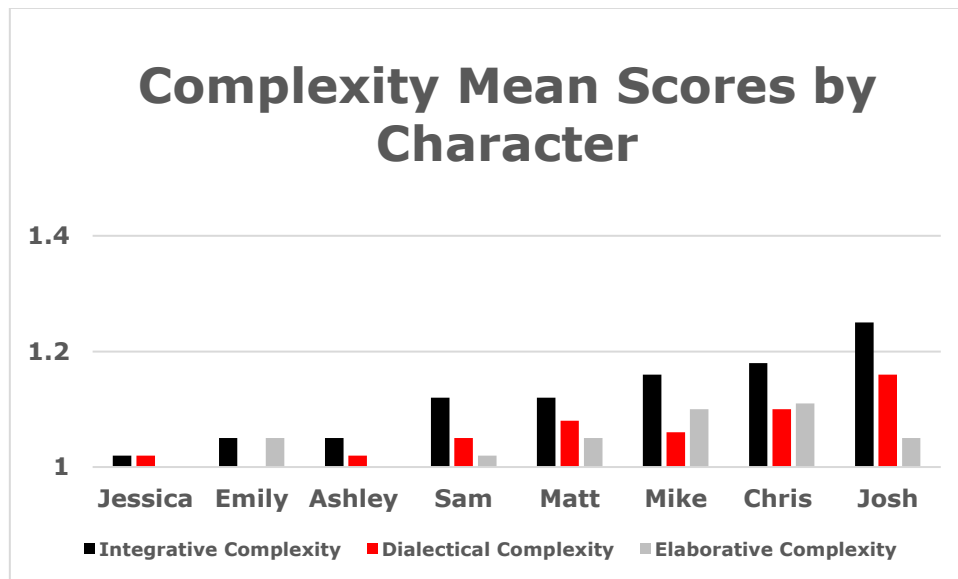


Figure 2. Complexity Mean Scores by Character.

Integrative complexity: Jessica M = 1.02, Emily M = 1.05, Ashley M = 1.05, Sam M = 1.12, Matt M = 1.12, Mike M = 1.16, Chris M = 1.18, Josh M = 1.25; Dialectical Complexity: Jessica M = 1.02, Emily M = 1.00, Ashley M = 1.02, Sam M = 1.05, Matt M = 1.08, Mike M = 1.06, Chris M = 1.10, Josh M = 1.16; Elaborative Complexity: Jessica M = 1.00, Emily M = 1.05, Ashley M = 1.00, Sam M = 1.02; Matt M = 1.05, Mike M = 1.10, Chris M = 1.11, Josh M = 1.05

A series of one-way ANOVAs (analysis of variance) revealed significant main effects for integrative complexity and dialectical complexity (Integrative Complexity $F(1, 158) = 6.40, p < .01$, partial eta-squared = .04; Dialectical Complexity $F(1, 158) = 5.78, p < .02$, partial eta-squared = .035). As hypothesized, the female characters averaged lower complexity scores than the male characters (Integrative Complexity Female M = 1.06, Male M = 1.18; Dialectical Complexity Female M = 1.02, Male M = 1.10). Elaborative complexity did not achieve statistical significance ($p = .052$); however, the mean scores descriptively followed pattern, with the female characters scoring lower than the male characters (Elaborative Complexity Female M = 1.02, Male M = 1.08). Additional analysis was conducted to calculate the individual means score for each character, which are reported in Figure 2.

Discussion

The above results show significant differences in the complexity levels of the female and male characters in *Until Dawn*: the female characters scored lower than the male characters significantly for integrative complexity and dialectical complexity, and descriptively for elaborative complexity. These findings largely reflect the gender-related findings seen in McCullough's (2019a) analysis of horror films and align with the proposed hypothesis. The following subsections discuss some possible explanations for this study's findings and potential directions for future research.

Conflict, Agency, and Complexity

According to the value pluralism model, higher levels of integrative complexity are connected to conflict (Tetlock, 1986), and according to McCullough (2019d), higher levels of integrative complexity are associated with higher levels of agency. Characters that are more active within their narratives appear to be more linguistically complex than more passive characters. This may explain why the male characters in *Until Dawn* are more complex than the female characters.



Figure 3. The player/Mike is given the option to shoot Emily in Chapter 8. Screenshot by the author.

Male characters in video games are often intertwined with conflict—thematically, narratively, or personally (see Kirkland, 2009 and Kline et al., 2003 for greater discussion). In the context of *Until Dawn*, the male characters are primary sources of conflict. As previously discussed, Josh serves as a secondary antagonist throughout the first part of the game, seeking revenge against his friends for their treatment of his sisters.³ The other three playable male characters are each presented with at least one opportunity to kill another character, thereby inducing additional conflict into the narrative. For example, Mike can shoot and kill Emily after she is bitten by the wendigo, Matt can let Emily fall to her apparent death at the Fire Tower, and Chris is forced to make decisions regarding who will live and who will die during the trap sequences.

While ultimately no one immediately dies because of Matt's and Chris's decisions in the above examples (i.e., Emily survives the fall, and Chris, Ashley, and Josh survive the traps since they are staged), their decisions have potential dire consequences later in the game. For example, Chris's decisions during the trap sequences directly influence whether Ashley unlocks and opens the lodge's door in Chapter 8, allowing Chris inside when he is chased by the wendigo and saving his life, or leaves the door locked and lets him die. This scenario speaks to the characters' differing levels of agency. While the male characters make decisions that influence and progress the plot, the female

³ It is also notable that Josh is the only playable character who can potentially transform into a wendigo depending on the player's choices.

characters' decisions are often reactions or consequences of the male characters' earlier decisions.

This does not mean that the female characters instigate no conflict, but when they do so, it is often with the assistance of male characters. In the prologue, for instance, Ashley, Jessica, Emily, Matt, and Mike play a spiteful prank on Hannah by leveraging her crush on Mike, which eventually results in Hannah's transformation into a wendigo. As previously mentioned, this prank functions as the inciting incident for the central conflict of the game. Yet, while the prank appears to be primarily the idea of Emily and Jessica, the two participating male characters (Matt and Mike) are the more active participants in its execution: Mike lures Hannah to his room and directly interacts with her once she is there and Matt films the prank. In contrast, Ashley, Jessica, and Emily only hide, observe, and laugh.

Jessica is the most explicit example of the female characters' passivity within *Until Dawn*. She is kidnapped by a wendigo in Chapter 4 and does not reappear until Chapter 9, spending much of the game unconscious and inactive. Moreover, Jessica's possible deaths are more often the result of the actions and decisions of other characters (usually male) than the results of her own actions and decisions. For instance, in Chapter 4, Jessica dies if Mike does not run fast enough to catch up before the wendigo rips her jaw off. Here, whether Jessica dies or survives is completely beyond her control, independent of any possible actions she can take or decisions she can make as a character: "Jessica's storyline is largely influenced through . . . other characters . . . [Jessica] is the one with by far the least amount of agency in the game, regardless of how early into the story the other characters die" (Waldie, 2018, p. 34). She functions as an embodiment of passivity and her complexity scores reflect this. These differences in agency and conflict appear to explain the integrative complexity patterns witnessed in this study.

Limitations and Future Research

This study's findings suggest that, like in horror films, female characters are devalued and deemphasized in horror video games and made secondary to their male counterparts. Of course, *Until Dawn* is only one game, and the complexity patterns seen here may be unique to *Until Dawn* and not indicative of gender dynamics in horror video games as a whole. Additional research is needed to confirm the veracity of the above conclusion.

Moreover, the present study is the first (to my knowledge) to apply integrative complexity to the study of horror video games. The significant results highlight the applicability and potential of integrative complexity in the game studies' methodological canon. Future research can build upon this study in several ways including applying integrative complexity to other horror video games and to other distinctive genres

like, for example, Japanese RPGs, fighting games, and multiplayer online battle arena games (MOBAs).

Concluding Thoughts

The findings of the present study indicate that the female characters in *Until Dawn* lack in terms of complexity, nuance, and agency—more so than the male characters—which aligns with previous research (McCullough, 2019a) and scholarship that categorize the horror genre as conceptually and overarchingly antifeminist (e.g., Christensen, 2016; Logas, 1981; Sharrett, 1996). Horror narratives (whether unconsciously or intentionally) often reproduce outdated and outmoded gender hierarchies, casting male characters as active aggressors and female characters as passive recipients (Smith & Goodrum, 2017). These gendered depictions have real-world consequences. According to Welsh (2010), depictions of female characters in horror narratives tend to emphasize and reinforce antiquated gender roles and negative feminine stereotypes, and these depictions may result in negative gender role expectations and enforcements.

While there are individual horror narratives that depict female characters as embodiments of agency and even aggression (see Kelly, 2016 for examples), *Until Dawn* is not one such narrative, as illustrated by this study's findings. *Until Dawn* is yet another horror narrative that follows of traditional (and sadly, dominant) pattern within the horror genre of casting female characters as "ostensibly agentless" (Kelly, 2016, p. 89). Along with the necessary separation with cisnormative thinking discussed earlier in this article, the horror genre must divorce itself from its traditional patriarchal mindset and perspective in order to achieve "the feminist, subversive ideal described by some scholars" (McCullough, 2019a, p. 8; see also Trencansky, 2001).

References

- Baker-Brown, G., Ballard, E. J., Bluck, S., DeVries, B., Suedfeld, P., & Tetlock, P. E. (1992). The conceptual/integrative complexity scoring manual. In C. P. Smith (Ed.), *Motivation and personality: Handbook of thematic content analysis* (pp. 400–418). Cambridge University Press.
- Ballard, E. J. (1983). Canadian prime ministers: Complexity in political crises. *Canadian Psychology, 24*(2), 125–129.
- Brummett, B. (2013). What popular films teach us about values: Locked inside with the rage virus. *Journal of Popular Film & Television, 41*(2), 61–67.
- Buck, D. M. (2016). Defining transgender: What do lay definitions say about prejudice? *Psychology of Sexual Orientation and Gender Diversity, 3*, 465–472.

Christensen, K. (2016). "Look what you did to me!": (Anti)feminism and extratextuality in the remake of *A Nightmare on Elm Street* (2010). *Journal of Film & Video*, 66(2), 29–45.

Conway, L. G., III, & Conway, K. R. (2011). The terrorist rhetorical style and its consequences for understanding terrorist violence. *Dynamics of Asymmetric Conflict*, 4, 175–192.

Conway, L. G., III, Conway, K. R., Gornick, L. J., & Houck, S. C. (2014). Automated integrative complexity. *Political Psychology*, 35, 603–624.

Conway, L. G. III, Dodds, D., Hands Towgood, K., McClure, S., & Olson, J. (2011). The biological roots of complex thinking: Are heritable attitudes more complex? *Journal of Personality*, 79, 101–134.

Conway, L. G., III, Gornick, L. J., Burfiend, C., Mandella, P., Kuenzli, A., Houck, S. C., & Fullerton, D. T. (2012). Does simple rhetoric win elections? An integrative complexity analysis of U.S. presidential campaigns. *Political Psychology*, 33, 599–618.

Conway, L. G., III, Suedfeld, P., & Clements, S. M. (2003). Beyond the American reaction: Integrative complexity of Middle Eastern leaders during the 9/11 crisis. *Psicologia Politica*, 27, 93–103.

Conway, L. G., III, Suedfeld, P., & Tetlock, P. E. (2001). Integrative complexity and political decisions that lead to war or peace. In D. J. Christie (Ed.), *Peace, conflict, and violence: Peace psychology for the 21st century* (pp. 66–75). Prentice Hall/Pearson Education.

Conway, L. G., III, Thoemmes, F., Allison, A. M., Towgood, K. H., Wagner, M. J., Davey, K., Salcido, A., Stovall, A. N., Dodds, D. P., Bongard, K., & Conway, K. (2008). Two ways to be complex and why they matter: Implications for attitude strength and lying. *Journal of Personality and Social Psychology*, 95(5), 1029–1044.

Copeland, A. (2017). *Creating worlds with words: Exploring the languages of digital games using a corpus-driven approach* [Paper presentation]. Corpus Linguistics, Glasgow, Scotland, United Kingdom.

Dwulecki, S., & Khaledi, A. (2017). "I am trying to help you. And this 'game' you're playing...": An analysis of the rhetoric behind *Until Dawn's* psychology. *Slaskie Studia Polonistyczne*, 9(1), 29–50.

Fassone, R., Giordano, F., & Girina, I. (2015). Re-framing video games in the light of cinema. *GAME: The Italian Journal of Game Studies*, 4(1), 5–13.

Griffin, M. (2019). *Evaluating player immersion in survival horror video game design* [Master's thesis, Ball State University]. Cardinal Scholar. <https://cardinalscholar.bsu.edu/handle/123456789/201687>

Gruenfeld, D. H. (1995). Status, ideology, and integrative complexity on the U.S. Supreme Court: Rethinking the politics of political decision making. *Journal of Personality and Social Psychology*, 68(1), 5–20.

Houck, S. C., & Conway, L. G., III. (2019). Strategic communication and the integrative complexity-ideology relationship: Meta-analysis findings reveal differences between public politicians and private citizens in their use of simple rhetoric. *Political Psychology*, 40(5), 1119–1141.

Houck, S. C., Conway, L. G., III, & Gornick, L. J. (2014). Automated integrative complexity: Current challenges and future directions. *Political Psychology*, 35, 647–659.

Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129(3), 339–375.

Kelly, C. R. (2016). Camp horror and the gendered politics of screen violence: Subverting the monstrous-feminine in *Teeth* (2007). *Women's Studies in Communication*, 30(1), 86–106.

Kirkland, E. (2009). Masculinity in video games: The gendered gameplay of *Silent Hill*. *Camera Obscura: Feminism, Culture, and Media Studies*, 24(2(71)), 161–183.

Kline, S., Dyer-Witthford, N., & de Peuter, G. (2003). *Digital play: The interaction of technology, culture, and marketing*. McGill-Queen's University Press.

Labre, M. P., & Duke, L., (2004). "Nothing like a brisk walk and a spot of demon slaughter to make a girl's night": The construction of the female hero in the *Buffy* video game. *Journal of Communication Inquiry*, 28(1), 138–156.

Logas, M. B. (1981, June). Chicago critics team up against film violence. *Ms.*, 21.

McCullough, H. (2019a). Be complex, be very complex: Evaluating the integrative complexity of main characters in horror films. *Psychology of Popular Media*. Advance online publication.

McCullough, H. (2019b). From *Zelda* to *Stanley*: Comparing the integrative complexity of six video game genres. *Press Start*, 5(2), 125–136.

McCullough, H. (2019c). "Hey! Listen!": Video game dialogue, integrative complexity and the perception of quality. *Press Start*, 5(1), 94–107.

McCullough, H. (2019d). *Is the Disney villain dead? A linguistic analysis of Disney* [Paper presentation]. Northeast Popular Culture Association 41st Annual Conference, Portsmouth, NH, United States.

McCullough, H. (2020). The diamonds and the dross: A quantitative exploration of integrative complexity in fanfiction. *Psychology of Popular Media*, 9(1), 59–68.

McCullough, H., & Conway, L. G., III. (2018a). "And the Oscar goes to...": Integrative complexity's predictive power in the film industry. *Psychology of Aesthetics, Creativity, and the Arts*, 12(4), 392–398.

McCullough, H., & Conway, L. G., III. (2018b). The cognitive complexity of Miss Piggy and Osama bin Laden: Examining linguistic differences between fiction and reality. *Psychology of Popular Media Culture*, 7(4), 518–532.

McCullough, H., & Kalsher, M. J. (2019). The integrative complexity of media reports of natural disasters: A preliminary analysis. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 63(1), 601–605.

Pulliam, J. (2014). *Monstrous bodies: Feminine power in young adult horror fiction*. McFarland & Company.

Purnomo, L. A., Nababan, M. R., Santosa, R., & Kristina, D. (2016). *Game time: Revisiting ludic linguistics for game analysis* [Paper presentation]. International Seminar PRASASTI III: Current Research in Linguistics, Surakarta, Indonesia.

Robertson, A., Aiello, L. M., & Quercia, D. (2019). The language of dialogue is complex. *Proceedings of the International AAAI Conference on Web and Social Media*, 13, 428–439.

Sharrett, C. (1996). The horror film in neoconservative culture. In B. K. Grant (Ed.), *The dread of difference: Gender and the horror film* (pp. 253–278). University of Texas Press.

Smith, A. G., Suedfeld, P., Conway, L. G., III, & Winter, D. G. (2008). The language of violence: Distinguishing terrorist from nonterrorist groups by thematic content analysis. *Dynamics of Asymmetric Conflict*, 1, 142–163.

Smith, P., & Goodrum, M. (2017). "Corpses... coast to coast!" Trauma, gender, and race in 1950s horror comics. *Literature Compass*, 14(9), 1–15.

Stang, S. (2018). Shrieking, biting, and licking: The monstrous feminine in video games. *Press Start*, 4(2), 18–34.

Suedfeld, P. (2010). The cognitive processing of politics and politicians: Archival studies of conceptual and integrative complexity. *Journal of Personality, 78*(6), 1670–1702.

Suedfeld, P., & Epstein, Y. M. (1973). Attitudes, values, and ascription of responsibility: The Calley case. *Journal of Social Issues, 15*, 1–15.

Suedfeld, P., Tetlock, P. E., & Ramirez, C. (1997). War, peace, and integrative complexity: UN speeches on the Middle East problem, 1947–1976. *Journal of Conflict Resolution, 21*(3), 427–442.

Supermassive Games. (2015). *Until dawn* [PlayStation 4]. Sony Computer Entertainment.

Susinskiene, S., & Jurkoniene, E. (2010). The grammatical metaphor as a sociolinguistic marker in horror stories. *Nation & Language: Modern Aspects of Socio-Linguistic Development, 4*, 102–105.

Tadmor, C. T., Galinsky, A. D., & Maddux, W. W. (2012). Getting the most out of living abroad: Biculturalism and integrative complexity as key drivers of creative and professional success. *Journal of Personality and Social Psychology, 103*(3), 520–542.

Tavinor, G. (2017). What's my motivation? Video games and interpretative performance. *The Journal of Aesthetics and Art Criticism, 75*(1), 23–33.

Tetlock, P. E. (1984). Cognitive style and political ideology in the British House of Commons. *Journal of Personality and Social Psychology, 46*(2), 365–275.

Tetlock, P. E. (1986). A value pluralism model of ideological reasoning. *Journal of Personality and Social Psychology, 50*, 819–827.

The Collective. (2002). *Buffy the vampire slayer* [Xbox]. Electronic Arts.

Thoemmes, F., & Conway, L. G., III. (2007). Integrative complexity of 41 U.S. presidents. *Political Psychology, 28*, 193–226.

Trencansky, S. (2001). Final girls and terrible youth: Transgression in 1980s slasher horror. *The Journal of Popular Film and Television, 29*, 63–73.

Veale, K. (2012). "Interactive cinema" is an oxymoron but may not always be. *The International Journal of Computer Game Research, 12*(1). <http://gamestudies.org/1201/articles/veale>

Waldie, R. (2018). "It was just a prank, Han!": *Wendibros, girlfriend woes, and gender politics in Until Dawn* [Master's thesis, Concordia University]. Spectrum Research Repository. <https://spectrum.library.concordia.ca/983664/>

Wasike, B. (2017). Charismatic rhetoric, integrative complexity and the U.S. presidency: An analysis of the State of the Union Addresses (SOTU) from George Washington to Barack Obama. *Leadership Quarterly*, 28(6), 812–826.

Webb, S. & Rodgers, M. P. H. (2009). The lexical coverage of movies. *Applied Linguistics*, 30(3), 407–427.

Welsh, A. (2010). On the perils of living dangerously in the slasher horror film: Gender differences in the association between sexual activity and survival. *Sex Roles*, 62, 762–773.