



## Detecting an Autobiographical Criminal: Investigating Gender Differences in Staged Suicide Notes

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May 2019

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### ABSTRACT

**Suicide notes are valuable in assisting equivocal police investigations because they can provide access into the author's mind. An abundance of research has already linguistically analysed genuine and simulated suicide notes and have identified significant differences between the two. However, this only provides limited assistance in discerning note authenticity. Suicidology research has not yet considered how authors can linguistically construct gender in order to disguise their own, which may underpin some equivocal cases. The present study endeavoured to explore linguistic gender construction in staged suicide notes by cross-referencing suicide, deception and gendered-language corpuses with participants' self-produced staged suicide notes to determine whether authorship can be detected through language-use and contribute to evaluating suicide note veracity. Participants were student volunteers (n = 4: 2 males, 2 females), recruited from the University of Derby. A qualitative document-interview methodology was used to gain primary data and explore pragmatic meaning by thematically analysing participants' staged suicide notes and interview transcripts in order to categorise linguistic themes and explore whether pre-existing mental representations can influence language-use. Societal stereotypes regarding suicide and gender were found and linguistic features remained largely consistent with previous research. Findings may improve equivocal suicide investigations.**

KEY WORDS:	STAGED SUICIDE NOTES	THEMATIC ANALYSIS	FORENSIC LINGUISTICS	GENDER CONSTRUCTION	GENDER DECEPTION
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## Acknowledgements

*First and foremost, I would like to thank my supervisor, Dr. Joanna Adhikari for her assistance in manuscript preparation and for being a calming voice in moments of coding chaos. I would also like to thank Sara Hughes for the freedom she gave me to pursue my research interests in the first place; without her encouragement, this would not have been attempted. I would like to give a special thank you to Dr. Karin Spenser, for her help in getting this study through ethics, and to Dr. Henriette Bergstrøm, for her kind praise and general enthusiasm towards my work throughout my degree. Finally, a big thank you to all the participants. Without their investment and dedication, I would not have been able to conduct this research. I admire their courage in treading such emotional waters.*

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## Glossary

**Action verb** – A verb that expresses physical or mental action

**Attributive adjective** – An adjective that directly modifies a nominal (*see* nominal); usually comes before a noun without a linking verb

**Cognitive process verb** – A verb that conveys cognitive activity, such as perception, memory, thought, suggestion, reasoning and decision-making

**Discrepancy** – Higgin's (1987) self-discrepancy theory suggests that people compare themselves to internalised standards and feel emotional distress when they fall short; lack of compatibility or similarity

**Lexical Density** – The number of 'content' words (nouns, verbs, adjectives and adverbs) divided by the total number of words; measures how much information a text tries to convey (Johansson, 2008)

**Lexis (lexical)** – Words; vocabulary

**Negation** – Making a negative

**Negative particle** – The word 'not' (and its reduced form -n't); used to indicate negation, denial, refusal or prohibition

**Nominal** – A word functioning as a noun

**Present Tense Verb** – A verb that expresses action/state in the present time

**Relative clause** – A clause that starts with the relative pronouns who, that, which, whose, where and when; often used to define or identify the noun that precedes them

**Syntax (syntactical)** – Sentences; concerned with word order and sentence construction

## Introduction

Since time immemorial, offenders have been manipulating and corrupting physical evidence to escape culpability for criminal behaviour, resulting in investigators being charged with the responsibility of having to combat such meddling through investigative stratagems (Ferguson & Petherick, 2016). Hans Gross (1924) was one of the earliest crime-scene staging scholars to discuss situational 'defects' which, he suggested, was contradictions and improbabilities which occur when one tries to represent the situation as something different from what it really is. An investigator's responsibility therefore is to identify these defects and uncover any efforts made by an offender to evade capture. However, for the most part, the frequency and propensity of crime-scene staging is largely unknown (Ferguson & Petherick, 2016; Lupariello, Curti, Duval, Abbattista & Di Vella, 2018).

It is relatively common for offenders to engage in functional precautionary acts before, during and after a crime, intending to hinder forensic investigations and conceal an offender's identity and link to the crime, such as by using a mask or gloves, strategically choosing a secluded offence location and cleaning up the crime scene (Turvey, 2013; Ferguson & Petherick, 2016). Staging is a specific form of precautionary act. Ferguson and Petherick (2016) defines 'staging' as "the deliberate alteration of physical evidence at an alleged crime scene, in an effort to simulate events or offenses that did not occur, where the intent is to re-direct an investigation" (p.4). For example, if an offender who just committed homicide writes a suicide note on their victim's behalf, expressing supposed suicidal intent, it would constitute staging (Geberth, 2006; Hazelwood & Napier, 2004).

Thus, a precautionary act tends to involve removing or preventing something from being left behind at a scene whereas staging is the attempt to foil identification and thwart an investigation by introducing new evidence to give the illusion that something completely different had happened (Ferguson & Petherick, 2016; Geberth, 1996). Some scholars incorporate family and friends preserving the dignity of found victims by altering the scene as a form of staging (Hazelwood & Napier, 2004), however, this inclusion has been highly criticised because, in those instances, there is generally no underlying criminal motive or intent to redirect an investigation (Schlesinger, Gardenier, Jarvis & Sheehan-Cook, 2014; Geberth 1996).

Despite judicial agents acknowledging that certain elements of staging are common in homicide cases, investigative communities seem to know very little about them (Ferguson & Petherick, 2016). Only a handful of studies have attempted to estimate the proportion of offences involving crime scene staging, with inconsistent findings ranging from 0.1% to 8% prevalence, depending on the type of staging (Turvey, 2000; Keppel & Weis, 2004; Hazelwood & Napier, 2004; Schlesinger, Gardenier, Jarvis, & Sheehan-Cook, 2014), and fewer still have specifically analysed homicides staged as suicides even though research suggests that staged suicide is a prevalent form of staging (Adair & Dobersen, 1999; Eke, 2001; Ferguson & Petherick, 2016; Geberth, 1996; Hazelwood & Napier, 2004; Lupariello, Curti, Duval, Abbattista & Di Vella, 2018; Soderman & O'Connell, 1936).

The majority of the literature on staged death tends to be purely ad hoc and based on the experiential nature of law enforcement (Geberth, 1996; Lupariello, Curti, Duval, Abbattista & Di Vella, 2018; Schlesinger, Gardenier, Jarvis & Sheehan-Cook, 2014), save a handful of authors, which has resulted in a lack of consensus regarding how and why offenders perpetrate these behaviours (Hazelwood & Napier, 2004; Ferguson & Petherick, 2016). This is problematic, considering that staging is a historically consistent characteristic of criminal *modus operandi* (Turvey, 2000). Therefore, in order to improve investigative detection methods in cases where evidence is purposefully vague or misleading, or when a death is considered suspicious or questionable (Geberth, 1996), staged deaths, and staged suicides in particular, require further understanding.

### **Equivocal Suicide**

In 2017, over 30,000 inquests were undertaken in the UK to establish a cause of death in equivocal investigations (MoJ, 2018). Of those, the coroner concluded that 11% of cases were suicide and a further 17% remained unclassified or inconclusive (MoJ, 2018). An analysis into past unclassified coroner conclusions revealed that 6% of cases were indicative of 'possible' suicides and 31% were unsuccessfully identified as genuine suicides (MoJ, 2013). This suggests then that suicide is an ambiguous phenomenon; difficult to determine at the scene and difficult to determine in post-examinations.

The triggering of a suicidal state of mind has often been associated with external factors (e.g. relationship difficulties, dissatisfaction with social status) activating, or exacerbating, internal mechanisms (e.g. dysfunctional cognitive processes) (Jollant, Lawrence, Olié, Guillaume & Courtet, 2011). Clinically, it has been widely reported that risk of suicide becomes elevated in individuals who are at the climax of a complex pathological process in conjunction with persistent symptoms of neuroticism like depression and anxiety (Cassells, Paterson, Dowding & Morrison, 2005; Van Heeringen, 2001). It is reasoned that in this state of heightened arousal, one gains the cognitive clarity to communicate suicidal ideations (Cassells, Paterson, Dowding & Morrison, 2005).

A commonly basic tenet is that motivation affects language, which in turn divulges an individual's psychological state (Osgood, 1960). Thus, a suicidal person's motivation should be reflected and communicated through the content and structure of self-produced suicide notes (Jones & Bennell, 2007). It is argued therefore that this communicative motivation-driven behaviour, accompanied by their elevated level of arousal, is discernible through specific changes in language-use and linguistic expression (Schoene & Dethlefs, 2018). Moreover, some researchers contend that a suicidal author's depiction of their unique psychological state cannot be imitated or assimilated by non-suicidal counterparts (Leenaars, 1988), asserting the possibility of being able to differentiate suicidal (genuine) and non-suicidal (simulated) suicide notes.

### **Suicide Notes**

The study of suicide notes remains an atheoretical, fragmented, area (Jones & Bennell, 2007), possibly because so few individuals who complete suicide actually leave notes (an estimated 18%–37%; Leenaars, 1988; O'Connor, Sheehy, & O'Connor, 1999). Despite this, numerous studies have reliably identified similar structural and linguistic (or 'content') differences between genuine and simulated

suicide notes which may help determine note veracity, and in turn, identify veracious authors (Jones & Bennell, 2007). The form of a text, and its respective stylistic linguistic variation, is determined by different factors, such as content (the mode partly determines vocabulary), structure (genre and register influences writing style) and certain aspects of an author's psychosocial state (Daelemans, 2013). These psychological factors may include mental health, personality and existing schemas, whereas sociological factors include gender, age and regional language acquisition (Daelemans, 2013).

Schoene and Dethlefs (2016) observed that genuine suicide notes are characterised by shorter, less diversified, simpler sentences compared to simulated notes, as measured by average sentence length. This could be because, when under high levels of arousal, suicidal authors prioritise communicating the salient content of their note rather than on modifying propositions and using more complex sentence structures (Jones & Bennell, 2007; Gregory, 1999).

Furthermore, suicidal authors have a particular proclivity to use action verbs (e.g. bury, inform), give instructions (e.g. funeral wishes) and are less likely to explain their ultimate action whereas simulated notes tend to contain more cognitive process verbs (e.g. think, regret) which convey mental processes as opposed to physical actions, try to justify their reasoning and generally express immoral morality values towards suicide (Darbonne, 1969; Black, 1993; Lester & Leenaars, 1988; Schneidman & Farberow, 1957). This is perhaps due to non-suicidal author's employing a 'problem solving' approach and failing to appreciate that the doubts and conflicts a suicidal person faces have already been resolved (Gregory, 1999; Lester, 2004), and conversely, suicidal individuals have probably already exhibited 'warning signs' conveying their intentions to family and friends prior to their suicide completion (Correctional Service of Canada, 2001).

Also, though perhaps counter-intuitive, genuine notes are characterised by greater expression of positive affect and are interspersed throughout with indices of endearment vocabulary and concern for others (e.g. dear, love) (Leenaars, 1988; Ogilvie, Stone, & Shneidman, 1966), possibly suggesting an emotional confusion because, despite being cognitively resolute, the associated emotional state may still be ambivalent (Leenaars, 1988; Leenaars & Balance, 1984). This emotional ambivalence is argued to be pivotal at successfully distinguishing genuine suicide notes from simulated ones (Leenaars, 1988). Asking for forgiveness, however, appears to be pertinent to both genuine and simulated suicide note content, possibly suggesting that it is a socially-shared belief which is thus accessible to everyone; genuine or not (Ioannou & Debowska, 2014). Interestingly, asking for forgiveness seems to decrease with age, potentially due to a weakened association between suicide and perceptions of 'selfishness' (Ho, Yip, Chiu & Halliday, 1998).

Finally, genuine suicide notes are typically characterised by an external locus of control, attributing behaviour and circumstantial failures to external conditions, debatably so suicidal individuals can render themselves devoid of responsibility (Gregory, 1999). For example, certain favourable external conditions, such as occupational and financial opportunities, may produce higher social expectations, thus, failure to meet these standards may lead to a reduction in life satisfaction and an external attribution of blame (Baumeister, 1990). Contrastingly, simulated note writers tend to exude an internal locus of control which mirrors a stereotypically depressed cognitive state, conceivably because an internal locus of control is



exemplified in depressed individuals when explaining personal failures, shortcomings and negative events (Joiner & Wagner, 1995). Therefore, non-suicidal authors tend to rely on societal stereotypes of depressed and suicidal individuals, though to what extent these schemas affect their language-use, or whether it is simply because simulated authors would themselves feel depressed in this situation, is unclear and requires further pragmatic understanding.

### Gender Differences

As evidenced, some predictors of genuine suicidal ideation have been identified in past research, but no decisive threshold has been determined to specify the degree to which these found variables must be present in order to distinguish genuine from simulated suicide notes (Jones & Bennell, 2007). To further augment the intricacy of suicide notes, there is strong evidence to support that there are gender differences within the suicidal psyche and suicide note discourse, including the aforementioned structural and linguistic categories (Lester & Leenaars, 2016).

Females were found more likely to: use more negations (e.g. never, no), use more words indicative of cognitive processes (e.g. know, cause), use more discrepancies (e.g. would, should), use more words associated with anxiety (e.g. nervous, afraid) and use fewer references to friends (e.g. buddy, pal) than males (Lester & Leenaars, 2016). This implies that female suicide notes demonstrate more content indicative of defeat-entrapment, hopelessness and failure to meet certain expectations; for example, including a negation with “could” (e.g. never could, couldn’t even) may indicate that the person perceives themselves as falling short of their own standards (Higgins, 1987) – which is consistent with international findings (Lester & Leenaars, 2016; Lester, 2014). This could also suggest that suicidal females tend to exude an internal locus of control, which contradicts earlier research. However, though internal attribution (i.e. self-blaming) is correlated with depression, not all suicidal individuals are depressed and vice versa (Baumeister, 1990). Furthermore, depression may cease to be a significant predictor of suicide when hopelessness is controlled for (Cole, 1988), meaning that suicidal females may simply feel greater self-discrepancy than suicidal males, possibly due to demanding societal expectations (Joiner & Wagner, 1995). It is important to note however that just because females tend to use these linguistic features more frequently, that does not make self-discrepancy female-exclusive. Male suicide notes have been found to express much more linguistic ambivalence regarding perception of one’s self, one’s purpose and one’s emotions, thus, though linguistically different, self-discrepancy may potentially be pertinent to the motivation of both female *and* male suicide (Canbolat, 2018; Lester & Leenaars, 2016).

Furthermore, there are noticeable gender differences in written genres other than suicide notes. For example, Argamon, Koppel, Fine and Shimoni (2003) found that females used more (first, second and third-person) pronouns and negative particles (e.g. not, ain’t) than males in both fictional and non-fictional texts regarding various topics such as science and world affairs. However, there are within-group differences, for instance females used more pronouns, negative particles and present tense verbs in the fictional texts but used more attributive adjectives (modifies nominals, e.g. *bad* man, *horrible* things), determiners, nouns, prepositions and had longer word length in the non-fictional texts (Argamon, Koppel, Fine & Shimoni, 2003). Though differing in frequency, the exact same differences could be found for the male writers in fictional and non-fictional texts (Argamon, Koppel, Fine

& Shimoni, 2003). This could then suggest that males and females employ different strategies to convey the same information, thus, language-use may be influenced by genre as much as it is by gender. However, what suicidology research has failed to acknowledge is the idea that gender can be 'performed' through linguistics, thus is 'constructed', meaning authors can falsify the representation of gender (Rodino, 1997; Ho, Lowry, Warkentin, Yang & Hollister, 2017).

### **Gender Deception**

When falsifying gender, asynchronous communication is advantageous as it gives deceivers ample opportunity to design and revise their messages so as to make them as believable and persuasive as possible (Zhou, Burgoon, Nunamaker & Twitchell, 2004). Gender misrepresentation and imitation has been reported as one of the main forms of deception in online platforms (Ho & Hollister, 2013). This particular medium allows users to take on a new persona and pretend to be someone else, such as a male pretending to be female in order to get more attention (Bruckman, 1993). This then provides deceivers with the opportunity to select specific aspects of the impression they intend to mimic along with the privilege of choosing what information they want their recipient to receive (Hills, 2000). However, as demonstrated above, there is evidence to suggest that gender can be identified through language-use (Thomson & Murachver, 2001), thus questioning how much control deceivers have over their portrayals (Hills, 2000).

Both digital and handwritten texts lack the visual and aural cues that would be found in face-to-face interactions, which help all parties (consciously or not) understand and contextualise important aspects of the conversation (Hills, 2000). In the absence of audio-visual cues, we depend on the language a person uses to make certain attributions. For example, preconceptions of stereotypical gender-preferential language, such as females being more apologetic and emotive and males being more insulting and abrasive, may significantly influence how people attribute gender in written texts (Thompson & Murachver, 2001).

Gender-preferential language is thought to first develop in primary school, for example: Mulac, Studley and Blau (1990) showed gender differences in nine-year-old children's written language. More specifically, girls wrote more emotively and used more relative clauses and hedges whereas boys used more judgemental phrases and active verbs (Mulac, Studley & Blau, 1990). This suggests that gendered language may be instilled into our sociolect from an early age, potentially due to parents, peers and society overtly and covertly reinforcing strict adherence to stereotypical gender roles through the use of labels which, consequently, underpins the early adoption of gender preferential language (Witt, 1997).

However, Palomares (2009) and Janssen and Murachver (2004) found that, rather than enacting their own gender through their writing, writers used language befitting the passage of topic, for example, more 'male-preferential' linguistic devices were employed in texts involving political debate, cars and sports whereas more 'female-preferential' language features were found in passages involving socioemotional descriptions, shopping and fashion/clothing, regardless of the author's gender. Additionally, Hancock, Stutts and Bass (2014) found participant accuracy of determining an author's gender and level of femininity no better than at chance level. This then implies that language is gender-preferential rather than gender-exclusive (meaning, linguistic features are not solely used by one gender, but by both men and

women) and is a dynamic (as opposed to static) linguistic factor which is shaped by, and dependent on, the context (Fitzpatrick, Mulac & Dindia, 1995; Palomares, 2009).

Linguistic analysis of gender deception has already been applied to criminal behaviour, particularly that of online deception (Orebaugh & Allnutt, 2009). This combination has been especially pertinent for detecting online child exploiters whom try to groom children by posing as different genders and ages (Orebaugh & Allnutt, 2009; Peersman, Daelemans & Van Vaerenbergh, 2011). Research has demonstrated that analysing the lexical and syntactical features of a text can provide high accuracy in discerning between child authors and online groomers, as well as for gender predictability (Orebaugh & Allnutt, 2009; Peersman, Daelemans & Van Vaerenbergh, 2011).

Though some features may be more characteristic of one gender than the other, they are by no means definitional of gender in themselves, thus, in order to identify an author's gender, one must consider consistent patterns of use at the lexical, syntactic and discourse level and not just individual items (Hills, 2000; Daelemans, 2013). It is this amalgamation of characteristics that forms an author's unique writing style, or 'writeprint' (a metaphorical linguistic fingerprint), which can then be linked to specific 'groups', such as gender, using a statistical likelihood (Orebaugh & Allnut, 2009). Despite substantial evidence of linguistic gender deception, the combination of linguistic analysis and gender-construction has received very little attention regarding suicide notes.

### **Detecting Deception**

The increasing occurrence of deceit in written texts, both online and offline, and the continuing perpetration of criminal staging, has motivated the need for methods and computer programs to automatically detect deceptive behaviour, particularly deception based on demographic data, such as gender, age and religion, due to recent security concerns (Pérez-Rosas & Mihalcea, 2014). The success of existing policing techniques remains a dark figure however as, to date, most equivocal investigations are ad hoc with unknown error rates (Ferguson & Petherick, 2016).

Deception detection has typically been applied to discriminate between true and false statements, for example, Fornaciari and Poesio (2013) analysed transcripts of court cases to identify deceptive testimonies and found liars use more negations, cognitive processes, negative affect and write more in the present tense whereas truth-tellers used more certainty, temporal and spatial lexis and positive affect. Additionally, Adams (2002) found that deceptive narratives written by suspects and victims were more likely to contain negations and equivocations (e.g. maybe, probably) but significantly less likely to contain unique sensory detail, presumably because the deceivers have no relevant sensory data as well as to possibly avoid implicating themselves or accidentally provide refutable information. These linguistic characteristics could partly explain why deceivers also tend to use fewer average syllables per word but more simpler sentences and number of words overall than truth-tellers (Burgoon, Blair, Qin & Nunamarker, 2003; Parapar, Losada & Barreiro, 2014; Zhou, Burgoon, Nunamaker & Twitchell, 2004; Hancock, Curry, Goorha & Woodworth, 2007), because formulating believable, non-contradictory, stories may be more cognitively taxing than telling the truth (Vrij, Granhag & Porter, 2010).

Language-use in deceitful accounts therefore seems to have some overlap with both simulated suicide notes and non-suicidal fictional texts, as all three genres of writing

tend to use more negations, cognitive processes, present tense verbs and negative affect than their counterparts, potentially indicating that deceptive linguistic devices are consistent across different genres of texts. Moreover, female deceivers have been found to be more easily detected than male deceivers (Pérez-Rosas & Mihalcea, 2014; Van de Loo, De Pauw & Daelemans, 2016), possibly because females tend to use more male-preferential language when lying (Pérez-Rosas & Mihalcea, 2014), which, when combined with other typically female-preferential linguistic devices, may help identify them. It could also be that males and females differentially use deception, for example, males have been found to lie more for monetary gain whereas females have been found to lie more in opposite-sex dialogues (Childs, 2012; Tyler & Feldman, 2006).

Though efforts have been made by different automatic detection tools to try and identify deceptive behaviour using computational linguistic approaches – like the ‘Linguistic Inquiry and Word Count’ (LIWC) or Receiver Operating Characteristic (ROC) Analysis, which have demonstrated some effectiveness (Aladağ, Muderrisoglu, Akbas, Zahmacioglu & Bingol, 2018; Jones & Bennell, 2007; Lester & Leenaars, 2016; Pérez-Rosas & Mihalcea, 2014) – many investigations of equivocal deaths ultimately rely on officers’ past experience to assist investigators in assessing the threat level presented in different cases (Albrecht, 2010), because there is no nationally implemented detection method as of yet. Thus, a suicide note’s authenticity is frequently left to subjective human judgement, which has been evidenced to be no more effective than leaving it to chance (Ault, Hazelwood & Reboussin, 1994; Snook & Mercer, 2010), with deception-detection accuracy ranging from 55%–58% (Frank, Feeley, Paolantonio & Servoss, 2004). As a result, the exact number of staged suicides is unknown, most likely occurring more often than is reported due to a successful deception (Ferguson & Petherick, 2016).

### **Forensic Linguistics**

The application of linguistic knowledge and techniques to legal forums, also known as forensic linguistics, allows inferences to be made between crime, law and language for use in police investigations, police interviews and court proceedings (Olsson & Luchjenbroers, 2013). Forensic linguistics is often used to attribute authorship in written texts or distinguish truthful from deceptive statements, such as in cases involving equivocal deaths, by deconstructing an author’s lexical choice, syntactic structure and discourse coherence in order to categorise and determine demographic and psychological traits, such as gender and intent as previously mentioned, which can aid judicial agents (Daelemans, 2013; Rosso & Cagnina, 2017).

For example, in 2005, Howard Simmerson was convicted for the murder of Julie Turner (Svoboda, 2009). Simmerson staged the murder by texting Julie’s husband, pretending to be her, saying that she was not coming home because she needed to sort herself out (Svoboda, 2009). Forensic linguist, John Olsson, compared these texts with excerpts from Simmerson’s police interview transcripts and noticed linguistic similarities, such as the repeated co-occurrence of the phrases “sort my head out” and “sort my life out” (Olsson, 2012). When cross-examined with extensive linguistic corpora, this phrasal repetition was determined to be almost unique – “sort my life out”, for instance, appeared only once in a 100-million-word sample – and Simmerson used these phrases in the same sequence on different occasions, which indicated that he almost certainly wrote ‘Julie’s’ texts because of the syntactic

rarity (Olsson, 2012). Alongside other noticeable linguistic features, like frequently using full stops where we would usually use commas, or lack of ‘motherly’ jargon, Olsson was able to discern the authenticity (or lack thereof) of ‘Julie’s’ texts which helped pinpoint Simmerson as the true author (Olsson, 2012).

Many computational linguistic programs – including those specifically designed to detect deception (Hauch, Blandón-Gitlin, Masip & Sporer, 2015) – have been based on forensic linguistic research and the notion that authorship can reliably be attributed (Crankshaw, 2012), however, though an author’s writing style (or ‘writeprint’) is likely to remain consistent across contemporary texts (Orebaugh & Allnut, 2009), it tends to change over time, for example: an adult is unlikely to write the same way as they did as a child, which complicates its use as a viable forensics tool (Coulthard, 2004). This then implies that using quantifiable linguistic features alone to attribute authorship does not provide adequate internal reliability. Additionally, studies which have applied forensic linguistics to suicide notes have done so almost exclusively quantitatively, thus possibly overlooking pragmatic influences on language-use (Sanger & Veach, 2008).

On the other hand, qualitative linguistic analyses of suicide notes typically tend to focus on the content of what is being said, along with the context in which the language was occurring (Pennebaker & Stone, 2004), in order to identify psychological suicidal correlates (O’Connor, Sheehy & O’Connor, 1999), verify theories about suicide motive (Rogers, Bromley, McNally & Lester, 2007), understand interpersonal effects (Sanger & Veach, 2008) or to inform and help develop detection-prevention measures (Foster, 2003). Qualitative *forensic* linguistic analyses however are primarily used post-investigation to determine motive or analyse personality aspects, particularly if the case was a murder-suicide (Knoll & Meloy, 2014). Thus, the potential viability of a qualitative forensic linguistic tool is unknown.

Others have looked at socially shared beliefs of suicide and whether this affects the content of suicide notes, with findings concluding that external frustrations and depressive personalities are commonly shared beliefs amongst both suicidal and non-suicidal individuals (McClelland, Reicher & Booth, 2000; Şahin, Şahin & Tümer, 1994), yet, to what extent shared beliefs may potentially affect the content of a staged suicide note is also unknown. Therefore, employing a qualitative forensic linguistic approach to pragmatically examine staged suicide notes could shed light on significant, yet underestimated, insights regarding psychological motive and suicidal thought patterns, which, when used in conjunction with quantitative linguistic features, could serve as a much more robust method to discern suicide note veracity.

### **The Current Study**

To the researcher’s knowledge, no study has combined linguistic gender construction/performance with suicide note writing. Though the majority of existing suicidology research has operated using a binary male-female conceptualisation, ‘gender’ rather than ‘sex’ will be the focus of discussion as ‘gender’ refers to the socially, and thus linguistically, constructed conceptions based on sex, whereas ‘sex’ merely refers to a biological distinction (Coates, 2016). Additionally, though attempters of suicide (i.e. those who were ‘unsuccessful’ at committing suicide for various reasons) have been interviewed (DeJong, Overholser & Stockmeier, 2010),

the researcher found no other study to interview simulated suicide note authors about their written note. Interviewing authors of fake suicide notes could provide insight into whether personal or social preconceptions of suicide and gender can influence staged language and staged suicide note content. Qualitatively exploring how these social schemas may be able to influence suicide note jargon could highlight identifiable dichotomous thought-patterns between genuine and simulated suicidal ideation, which might potentially provide a further layer of authorship authenticity detection.

In response, this study employs a different theoretical perspective by qualitatively exploring the extent to which gender can affect the content, structure and motivation behind fictitious suicidal personas, which may assist investigators in discerning suicide note veracity and improve authorship detection methods. With the background research in mind, gender and suicide stereotypes were expected to be found.

## **Methodology**

### **Design**

A qualitative approach was chosen because it allowed for a more thorough analysis of linguistic choice and societal views in which to serve as a foundation for future staged suicide note discernibility tools to build on (Pope & Mays, 1995; Bourne, 2017). However, some researchers contend that qualitative research is usually conducted in more naturalistic settings (Bourne, 2017), which was ethically challenging to achieve for this particular study because it would require obtaining actual staged suicide notes. Therefore, a document-interview methodology was chosen as it is useful in situations where first-hand observations are not possible but can still provide primary data (Czarniawska, 2007). Participant-written documents provides at least some modicum of access to a natural setting whose meaning can then be explored in subsequent semi-structured interviews (Schultze & Avital, 2011). This methodology encouraged participants to reflect on their externalised representations, providing insight into why and how they linguistically constructed the world around them (Schultze & Avital, 2011).

### **Participants**

A volunteer sample was used. This immediately narrowed down potential participants to those who were comfortable with the research topic and acquired candidates who were more willing to openly and honestly share sensitive information (Creswell, 2007). Participation was open to criminal psychology, criminology, policing and investigations and forensic science University of Derby students as they would have greater exposure to – and presumably greater comfortability with – the topic of suicide. However, only students from criminal psychology and criminology volunteered. Additionally, not all of those who were interested were allowed to take part.

Potential participants were selected via a thorough and systematic filtering process intended to filter out vulnerable students who could have been adversely affected or triggered from participation. The researcher first advertised the study in several of the researcher's supervisor's lectures (as the students are known to the supervisor)

and collated willing volunteers from there. Participants were told that the study involves topics of suicide and murder and the researcher discouraged anyone with a personal connection to suicide from participating. The researcher then coordinated with the supervisor (who coordinated with other colleagues) to check all potential participants' backgrounds, explicitly blacklisting students who were on mental health plans and/or had a known history of suicidal ideation or vulnerability, and then provided the researcher with an updated list of feasible participants. In addition, all participants must have been able to read, write and speak fluent English; those who could not were also excluded from participation.

Once the final list of potential participants had been refined and approved by the supervisor, the select few were asked to complete the Oxford Happiness Questionnaire (Hills & Argyle, 2002). This was to ensure that participants had a healthy state of mind in order to further minimise the risk of possibly affecting those who may be vulnerable. Those who did not meet the threshold average of 4 (i.e. "moderately happy"; Hills & Argyle, 2002) and above were not allowed to participate. 1 person did not meet the threshold average, resulting in 4 participants eligible to take part. These participants included 2 cis-males and 2 cis-females between the ages of 20 and 31 ( $M = 27.5$ ,  $SD = 5$ ). 2 participants (1 male, 1 female) were white, 1 female was black, and 1 male was mixed. Due to time constraints, this small sample size was deemed acceptable.

## Materials

The participants were given a staging scenario that was based on a real staged suicide case (see WBTV, 2018) but was slightly adapted so that if the participant was already aware of the case, they would not have been influenced by additional information which could have affected the content of their note. Participants were asked to write from the perspective of a small business owner called Stephen, who had just killed his unemployed sister Amy (who was a mother to 2 children, Paul and Milly). In the scenario, Stephen had just caught Amy stealing money from him. The 'Stephen-Amy' scenario was intended to be used as a guide for the participants' own staged suicide notes and was carefully (linguistically) designed in order to psychologically distance the participant from the thought of themselves committing both murder and suicide, thus attempting to protect the participant from harm.

After completing the staged suicide note, participants were asked to write a counsellor's response to Amy's suicidal state of mind, specifically focusing on preventing the suicide from occurring. The purpose of the counsellor's response was to counteract 'planting the seed' of a suicidal ideation, returning the participants to their original state of mind before the study began (see Black, 1993). By refuting Amy's suicide note, participants were effectively inoculating themselves against similar thoughts. The counsellor's note was only used to protect the participant and was not used for analysis.

The interview was semi-structured and the questions were divided into three main categories: *scenario*, *opinion* and *clarity*. Scenario questions came first to re-introduce the participant to their note and re-engage them with the research. These questions were purposively more descriptive in nature to allow participants time to get used to the interview situation (McNamara, 2009). Expansive opinion-based questions then followed so the participant could start reflecting and thinking more critically about their own views towards suicide (Kvale, 1996). This then made

clarifying/expanding on their note easier, hence why clarity questions came after. Additionally, the questions had been arranged to present the more difficult/controversial questions (i.e. the opinion and clarity questions) later in the interview to allow the interviewee time to build up confidence and trust in the interviewer (Jacob & Furgerson, 2012). Moreover, six questions were deemed an adequate amount because each participant's note and interview were thought to, collectively, provide sufficient data for analysis. The proposed prompts and probes had been designed to gauge any potential stereotypical beliefs regarding suicide to better contextualise the content of participants' notes and interviews (Mercer, 2002).

## **Procedure**

### **Preparation:**

After the researcher had received the approved list of potential participants from the supervisor, each person was contacted to ask whether or not they would still like to participate, and if so, agreed to meet and go through the information sheet together. During this meeting, each participant was also asked to sign a consent form, agreeing to do the Oxford Happiness Questionnaire (Hills & Argyle, 2002) – those who agreed were then asked to complete the questionnaire. The results were checked to ensure they had met the average threshold of 4 and above. Those who did not, were not allowed to participate.

After a 48 hour 'cooling off' period – to allow the participants time to digest the information and receive the updated list – the participants were re-contacted, and if they were still interested, arranged another meeting to conduct the study. This preliminary meeting was also used to build further rapport between participants and the researcher due to the sensitive topic of the research. The writing task and follow-up interview were conducted consecutively in a private room at the University of Derby's Friar Gate campus. Each task/interview was only conducted when the supervisor or supervisor's colleagues were in the building and on call just in case the participant needed assistance. No participant required assistance. Additionally, each participant's progress was uniquely recorded and routinely updated via a spreadsheet to easily keep track and ensure each participant was receiving the correct ethical treatment.

### **Part One:**

The staged suicide note writing was not given a time limit. Each participant was given sufficient opportunities to ask the researcher any questions relating to the study. If the participant still wished to take part, they were then be asked to sign another consent form. The researcher then verbally explained what the participant must do and then gave the participant the scenario form to complete. The researcher remained present throughout the writing process to monitor participants' reactions to writing the document and terminate the session if necessary. No sessions required termination. However, though in the same room, the researcher left a comfortable distance between themselves and the participant to help the participant feel more relaxed and less pressured. Additionally, the researcher seemed busy during the writing process so that the participant did not feel watched nor pressured for time.

Once completed, the participant was asked to write a counsellor's response to help alleviate any suicidal ideations that may have arose during the task. Again, there was no time limit. During this time, the researcher went through the participant's



newly written staged note and prepared questions for the follow-up interview that immediately followed. This was done to reduce the likelihood of participants not attending a follow-up interview on another date.

### **Part Two:**

Each semi-structured interview lasted 10–15 minutes. To ensure interviewee responses were not biased, the researcher remained neutral during the interview but not insensitive. The participant's staged note was used throughout for reference. A voice-recorder was used with the participant's permission. Once over, the researcher thanked the participants and made emphatically clear that they could withdraw up to 14 days after without repercussion. The researcher then provided the participant with the debriefing form and asked if they had any further questions regarding the study. The researcher also ended the study by engaging in more informal conversation, such as talking about participants' plans for the rest of the day. This was to help return the participant to normal thinking.

### **Analytical Theory**

Documents can arguably provide concrete footprints that reveal information about people's lives and their social settings because each document has a specific function (Coffey, 2014). Suicide notes, for example, may contain important information about an individual's perception of reality, including mental representations and experiences (Canbolat, 2018). Though the analysis was sensitive to the overall structure of the staged suicide notes, the primary focus was on the collection of linguistic and latent thematic categories. Therefore, in order to identify and organise salient patterns of meaning across data sets, patterns that go beyond the semantic level and into underlying conceptualisations, a thematic analysis was conducted to make sense of these commonalities (Braun & Clarke, 2006; Braun & Clarke, 2012). Though other epistemological approaches were considered, such as discourse and narrative analysis, thematic analysis was preferred because it ensured the researcher retained flexibility regarding theoretical frameworks (Braun & Clarke, 2012).

Analysis employed a social constructivist approach – a paradigm claiming reality and knowledge is socially constructed – to better understand the socio-cultural construction of gender and suicide (Braun & Clarke, 2006). Language is a key component of social constructivism as language allows us to share experience, meaning reality is intersubjective and not idiosyncratic, which can then categorise certain behaviours and people, thereby habitualising and institutionalising shared typologies of reality (DeLamater & Hyde, 1998). This then means that perspectives of gender and suicide may not be individual, but a product of a process external to the individual i.e. a product of social interaction (DeLamater & Hyde, 1998). Analysing data from a social constructivist theoretical framework assisted the researcher in extrapolating participant-shared themes. Furthermore, this meant that the research took on a critical, rather than experiential, orientation because the critical orientation seeks to investigate dominant patterns of thought based on contextual understanding (e.g. constructed views of gender and suicide) whereas the experiential approach is underpinned by language reflecting the ontological perspectival reality of a particular participant (Willig & Rogers, 2017). Analysis drew on insights from discursive psychology which explores the construction of talk and text through interpretative repertoires, rhetorical devices and linguistic resources

(Clarke & Kitzinger, 2004). This then suggests that, at the macro level, social constructivism has an epistemological foundation (Cunliffe, 2008). Additionally, data analysis was deductive in nature because the researcher brought in a series of pre-identified linguistic features to code and interpret data in order to cross-examine existing suicidology research (Braun & Clarke, 2012).

### Feature Selection

A document representation (in this case a staged suicide note) is composed of multiple types of linguistic and grammatical features. The researcher did not use automatic machine learning algorithms to identify these features, unlike the majority of previous studies on linguistic analysis and gender prediction, due to the qualitative nature of the study and financial complications. Instead, the researcher conducted a mini meta-analysis prior to data collection in order to compile and cross-reference pre-identified salient and overlapping linguistic features (see *Table 1* for an example) from various existing suicidal, gendered and deceptive written sources, including: suicide notes (Schoene & Dethlefs, 2016; Jones & Bennell, 2007; Black 1993; Lester & Leenaars, 2016; Ogilvie, Stone & Shneidman, 1966; Luyckx, Vaassen, Peersman & Daelemans, 2012), online and offline male-female texts (Ho, Lowdry, Warkentin, Yang & Hollister, 2017; Thomson & Murachver, 2001; Argamon, Koppel, Fine & Schimoni, 2003) and online and offline deceptive texts (Adams, 2002; Fornaciari and Poesio, 2013) to make genuine-staged suicide note comparisons possible.

**Table 1:** Comparing whether females and males used certain linguistic features more in fictional or non-fictional texts (Argamon, Koppel, Fine & Shimoni, 2003).

Linguistic Feature	Female	Male
First-person pronouns	FICTION	FICTION
Second-person pronouns	FICTION	FICTION
Third-person pronouns	FICTION	FICTION
Attributive adjectives	NON-FICTION	NON-FICTION
Negative particle	FICTION	FICTION
Present tense verbs	FICTION	FICTION
Determiners	NON-FICTION	NON-FICTION
Cardinal numbers	NON-FICTION	NON-FICTION
Nouns	NON-FICTION	NON-FICTION
Prepositions	NON-FICTION	NON-FICTION
Word length	FICTION	FICTION

The deceptive and gendered texts mentioned were chosen specifically because they focus on male-female similarities and differences. This polarising inclusion-criteria was intended to help find significant gender differences faster and more easily than analysing purely male or purely female studies. Additionally, the included deceptive and gendered studies allowed both males and females to write in the same genre about the same topics which improves the validity of comparing these identified linguistic differences. For example, only males writing about football and only females writing about childcare will most likely elicit different jargon, making comparison difficult; but if both wrote about football and both wrote about childcare, linguistic comparison is thereby possible.

The included suicide note research, however, had a less strict inclusion criteria. Suicidology studies which looked specifically at linguistic gender differences and suicidology studies which looked at genuine-simulated note differences were both incorporated into the meta-analysis, as the current study is exploring both polarities. Therefore, this inclusion criterion was deemed appropriate and necessary.

These three genres (suicide, gender and deception) were chosen for analysis because staged suicide notes are likely to contain elements of all three, thus immediately refining and targeting the more 'relevant' linguistic features associated with authenticating a suicide note. Assembling linguistic features from multiple genres of written texts, rather than drawing on insights from one particular sort, may provide a more holistic overview of staged suicide notes, and in turn, improve discerning note authenticity. The most prominent features (i.e. features found across all three specified genres) were then deliberately selected, ready for comparison with the participants' staged suicide notes. These features included affect, present tense verbs, pronouns, negation, and cognitive process verbs. The alternative, analysing from a broader perspective, and not just concentrating on the deceptive elements, was not the focus of this study. Themes elicited from the thematic analysis were then used to explore whether participants' preconceptions and existing expectations influenced, or could even explain, their use of these features. This was done because, though salient linguistic features have been identified in prior research, fewer studies have qualitatively looked at 'why' these features consistently occur; and none have done so in the context of staged suicide.

### **Ethical Considerations**

Due to the sensitive topic of the research, it was imperative that the researcher implemented certain procedures to protect the participant from harm. The researcher attempted to do this by: non-intrusive participant background checks; completion of the Oxford Happiness Questionnaire; writing a counsellor's response; purposive linguistic choices to distance participant from suicidal ideology; ample opportunities to ask questions and withdraw; detailed and non-deceptive documents, including where to find support if needed; researcher and supervisor contact details; carefully designed interview questions; and consideration of participant-researcher physical proximity and rapport before, during and after the study.

In addition, participant data had no identity markers that could associate the data with the relevant participant other than their unique participant code. Physical data (such as consent forms and written notes) was secured in a locked desk for which only the researcher had a key to. Digital data (transcripts) was stored on a password-protected computer, only accessibly by the researcher.

### **Findings & Discussion**

The current study was interested in how males and females linguistically constructed fictitious suicidal personas in order to identify any similarities and differences that can help discern suicide note veracity. The findings suggest that there are identifiable differences in the construction of these personas both between and within genders which are relatively consistent with previous genuine-simulated, gendered, and deceptive suicide note research. The discussion is split into two parts. Part One is concerned with the themes elicited from participant interviews regarding their staged suicide note and broader societal opinions regarding gender and suicide. Part Two will then explore whether these identified opinions and socially

shared beliefs can explain participants' lexical, syntactic and grammatical choices within their staged suicide notes, with particular focus on the linguistic features identified from the meta-analysis. Participants 1A and 1B are female, whereas 2A and 2B are male.

### Part One: Interviews

This section will identify the salient themes that emerged from thematically analysing participants' interviews (see *Table 2*). Participants' beliefs regarding gender and suicide will be explored in the context of their social and cultural knowledge and understanding of gendered suicide. Participants' socially shared views will then be used in Part Two to discuss whether they have impacted the content and construction of their own staged suicide note.

**Table 2:** Thematic Analysis

Theme:	Example:
Parenting	<ul style="list-style-type: none"> <li>• “She’s left behind two small children” (2B)</li> </ul>
Locus of Control	<ul style="list-style-type: none"> <li>• “Shame in how they’re living at the moment” (2A)</li> </ul>

#### i) Parenting

One of the most salient themes to have emerged from participant interviews was that of motherhood and participants' apparent shared belief in suicidal mothers' 'failure' towards duty of care (specifically, behaviourally and emotively), though there was some disagreement between genders regarding the individual themselves: “it’s difficult to ... believe that it’s acceptable and it’s a normal type of behaviour” (2B), “my children would always wonder why they weren’t enough for me to try harder to stay around (1B)”. Even though participants were invited to discuss parental suicide, they only addressed maternal suicide. This is likely to be, at least in part, due to the Amy-Stephen scenario in which participants were asked to construct a suicidal mother. The salience of this theme is further reflected by the participants' staged suicide notes as all of them wrote about motherhood, and half of them addressed their staged note directly to Amy’s children.

Within their interviews however, the majority of participants highlighted that either they, or at least other people, perceive suicide as ‘selfish’: “suicide is quite a selfish thing to do” (1B), “people would say committing suicide is a selfish act” (2B). Interestingly, the female participants perceived suicide to be more selfish than the males did. However, though the female participants held a more negative outlook towards suicidal mothers, their suggested reasoning as to why differed.

One female participant linked religion with her ‘immoral’ morality standpoint regarding suicide: “because I’m from a religious background, suicide is generally a sin” (1A), but she continued on to say “but I can understand why someone would think ... I can’t continue with life” (1A). Research has shown that people with relatively high levels of religiosity tend to have lower acceptability of suicide (Simonson, 2008; Stack & Kposowa, 2011). Thus, this particular participant’s faith may have influenced her critical view of suicide, despite her ability to empathise with people who have suicidal thoughts. It is important to note however that the

participant's level of commitment and engagement to her faith is unknown, so it is unclear as to the extent to which religious ideology may influence her own views (Stack & Kposowa, 2011).

Additionally, the UK is becoming an increasingly secular country, and with research suggesting that secular education is more accepting of suicide than religious education (Eskin, 2004), this participant may have a dichotomy of social-religious views regarding suicide. In contrast, research also suggests that religious communities are more positive than secular communities towards people who have considered killing themselves (Eskin, 2004; Simonson 2008). Therefore, religious people may disapprove of the act, but not the individual, which may then partly explain this participants' response.

This notion is supported by the other female participant, who – though she also disapproved of suicidal behaviour – linked her 'immoral' morality views regarding suicide to her personal experience of being a mother and, in doing so, criticised (specifically) suicidal mothers: "because I'm a mother myself, ... suicide is quite a selfish thing to do" (1B), "there wasn't enough love there for them to stay or fight" (1B). Though the traditional patriarchal assumption of motherhood ideology remains dominant, there are now a number of different contemporary mothering and motherhood ideologies that are competing for ascension, such as LGBTQ or young mothers, which indicates that mothers may differently construct mothering identities (Johnston & Swanson, 2006). Therefore, this participant may perceive that her motherhood ideology is superior to that of a suicidal mother: "I would hope that all parents felt that way about their children" (1B), "I would assume that most parents would want their children to know [they love them]" (1B). In effect, this participant may have a social projection bias in which she is optimistically overestimating how many other people act like she expects (Cooter, Feldman & Feldman, 2006).

Perhaps by breaking individual assumptions of what constitutes 'good' mothering (as derived from social norms), suicidal mothers may be more harshly judged than suicidal males, or than suicidal females who have no children, for violating these norms (Van Kleef, Wanders, Stamkou & Homan, 2015). For instance, Pirkis, Burgess, Blood and Francis (2007) found female suicide was both over-reported and took precedence over male suicide (despite more males dying by suicide) in media reports. Though, whether they were parents or not did not appear to be a significant factor. Nevertheless, it is plausible to argue that these females behaved outside expectation, and thus 'deserved' or 'required' more media covering. Conversely, paternal suicide is seemingly not as heavily judged which may also be why participants chose to only discuss female suicide.

The male participants shared similar views about 'good' parenting, which could suggest that their assumptions of motherhood norms bare some similarities to female assumptions, potentially because they are based on the same society and culture to the females: "[g]o out, seek support, work on your issues" (2B), "she couldn't provide the best for them as they deserve" (2A). However, one notable difference is that males perceived suicide to be more selfless than selfish, which is in direct contrast to how the females felt: "I think it's more selfless" (2B), "fortunately, they have a chance to write it down in words" (2B). Much like their female equivalent, there are an equal number of differently constructed fatherhood ideologies (Duckworth & Buzzanell, 2009); however, if the dominant male gender-norm continues to portray males as the 'bread winner', it is possible then that males may

perceive the suicidal ideology as a barrier to self-actualisation, which could lead to suicide completion being seen as a selfless act (Sandelaran, Cheah, & Lee, 2017).

It could also be argued that paternal gender-norms – not general male-gender norms – are not as publicly-policed as maternal gender-norms (as previously mentioned), thus, violating socially shared fatherhood expectations may result in a less critical, less judgemental reaction from the public. Therefore, males may not have the same negative social experience in being penalised for not conforming to certain expectations, meaning males may project this relaxed perspective onto others. However, this does fail to explain why males considered it more selfless than selfish. Moreover, male participants emphasised suicidal mothers being unable to provide for material needs (“[Amy] wasn’t good enough to be able to provide for her family” [2A]) whereas females discussed more about suicidal mothers’ failure to fulfil emotional needs (“anybody ... would make sure that their children ... [knew] it wasn’t their fault” [1B]). This could then indicate that males thought completion was selfless because it gives the surviving children a ‘better chance’ at material satisfaction, but females saw completion as selfish because it denies children of emotional care.

## ii) Locus of Control

Consistent with previous research on the dichotomous genuine-simulated locus of control (Joiner & Wagner, 1995; Jones & Bennell, 2007), every participant attributed suicidal ideation, in part, to an internal locus of control, mirroring a stereotypically depressed individual: “[Amy] just felt that ... she wasn’t good enough” (2A), “extremely depressed” (2B). Both males and females placed great importance on the notion that suicidal individuals lack hope: “they’re just thinking ... it’s better if I’m not here” (1A), “[suicidal] people ... genuinely believe that the world is better off without them” (1B).

Interestingly, females linked hopelessness specifically to suicidal mothers. One female participant stated how the only conceivable reason a mother would die by suicide, subsequently leaving their children behind, would be because “they do believe their children would be better off without them” (1B). This could imply then that, due to a (potentially socially shared) belief in suicidal mothers’ ‘failure’ to adequately provide for their children, hopelessness may be a result of self-discrepancy, and thus preceded suicidal thoughts. For example, a mother may perceive that they fall short of socially shared maternal standards, consequently leading to feelings of hopelessness regarding adequate parenting, and then the eventual perspective that their children would be better off without them (Higgins, 1987; Lester & Leenaars, 2016). Thus, hopelessness could be seen socially as a ‘pathway to’ suicidal thoughts.

This is somewhat consistent with the male participants. Although males also discussed the importance of hopelessness preceding suicidal ideology, males focused less on the parental aspect (though they did not completely ignore it) but instead prioritised the self: “they ... have to end it all as an escape route” (2A), “[Amy] just had to get out” (2B). This then indicates that suicidal hopelessness can be inferred differently depending on gender.

Within the suicide discourse, hopelessness has been significantly related to eventual suicide, implying that participants’ emphasis on the presence of hopelessness is valid (Beck, Brown, Berchick, Stewart & Steer, 1990). However, hopelessness has generally been correlated with an external locus of control in both Western and

Eastern cultures, as opposed to internal depressive episodes (Brezo, Paris & Turecki, 2006; Sahoo, Biswas & Agarwal, 2018). Therefore, participants' arguably critical, and overtly negative, perspective of maternal suicide may have influenced them to look 'inwards' to try and find fault with suicidal mothers' reasonings, rather than explore external factors. Though, this does not explain the inferential difference between genders, especially since both genders had relatively consistent beliefs regarding parenting. Perhaps then – though at risk of being reductionist – despite sharing views about what constitutes 'appropriate parenting', the male participants may be more socially inclined to be self-serving, and thus focus on the self, whereas the female participants may have greater expectations to be family-oriented, possibly due to the persistence of gender roles, resulting in different (internalised) interpretations and societal prioritisations (Donnelly et al., 2016).

However, research has also found that people attribute an internal locus of control, including hopelessness, to suicidal individuals regardless of whether they were a parent or not (Leenaars & Lester, 1991). Therefore, it is unlikely that participants' mentioning of hopelessness entirely stems from an apparent disapproval of mothers committing suicide but is instead influenced by larger socially shared beliefs regarding depression and its exemplification of an internal locus of control (Joiner & Wagner, 1995). This could then provide support to the contention that a genuine suicidal author's internal depiction cannot be imitated by non-suicidal counterparts (Leenaars, 1988). These generalised beliefs of suicidal ideation have been demonstrated to be shared and consumed from various media platforms (Pirkis, Burgess, Francis, Blood & Jolley, 2006), including online social networks (Dunlop, More & Romer, 2011), which the participants are likely to have been exposed to. Interestingly, media representations of female suicide have been found more likely to be framed as due to internal mechanisms and mental illness, whereas for male suicide, mental health was underreported and instead tended to be portrayed as externally-caused such as work-stress (Chen, Yip, Tsai, & Fan, 2012). Therefore, media representations of suicide seem to follow patriarchal gender assumptions of what constitutes acceptable and unacceptable behaviours (Chen, Yip, Tsai, & Fan, 2012).

Participants, however, did not entirely discount the influence of possible external factors as they all raised the issue of lack of finance and how it could contribute to feelings of maternal hopelessness: "because of the unemployment ... it has gotten a bit too much" (1A), "lack of financing for ... children to live and prosper, maybe they feel they can't provide the right life for them" (2A). Though it is likely that the Amy-Stephen scenario may have, to an extent, inadvertently 'primed' participants to highlight financial problems (as it states that Amy is unemployed), males and females were actually consistent in their inference of external financial factors and how they may apply to suicidal thoughts, unlike when discussing an internal locus of control.

Furthermore, participants contrastingly expressed a much more empathic perspective when talking about financial issues, compared to their somewhat deductive assumptions of internal reasonings: "[Stephen] would probably [have] loaned [Amy] some money" (2A), "she couldn't feel that she could go to him to ask for money" (2A). Therefore, as external factors are more accessible (thus potentially more understandable) to the general public, especially since money is so culturally-pertinent, participants might have a more intrinsic socially shared belief regarding the

impact that money (or lack thereof) can have on one's self (Hilgert, Hogarth & Beverly, 2003). Additionally, as money is gender-neutral, it is possible that due to the lack of gender reinforcement regarding money, males and females may have the same experience and thus have the same inference. However, this does not consider individual differences. Nevertheless, participants evidently struggled more to attribute suicidal thoughts to the more inaccessible internal reasoning of suicidal behaviour than they did for external factors.

### Part Two: Staged Suicide Notes

In this section, themes elicited from participants' interviews will be used to explore whether pre-existing mental representations of gender and suicide can affect the content and construction of a staged suicide note. This may assist equivocal suicide investigations by identifying potential pragmatic differences that could help discern the veracity of suicide notes.

**Table 3:** Linguistic features extracted from participants' staged suicide notes.

Linguistic features	Female		Male	
	1A	1B	2A	2B
No. of words	91	62	78	97
No. of sentences	6	6	8	9
No. of syllables	129	81	100	121
Lexical Density	0.56	0.53	0.55	0.54
1 <sup>st</sup> person pronouns	9	9	8	8
2 <sup>nd</sup> person pronouns	3	6	2	0
3 <sup>rd</sup> person pronouns	5	1	2	0
Negative particle	2	0	3	0
Negation	2	1	2	6
Forgiveness*	0	0	0	0
Positive Affect	5	7	5	5
Negative Affect	7	0	4	6
Justification	7	2	5	7
Present tense verbs	16	7	8	12
Cognitive process verbs	1	2	1	0
Adjectives	7	3	11	6
Adverbs	16	9	8	8
Determiners	4	2	10	9
Nouns	6	8	12	17
Verbs	22	13	12	22

\*Forgiveness was included because it is considered pertinent to both genuine and simulated suicide notes (Ioannou & Debowska, 2014).

Each participant wrote a staged suicide note that was roughly half a page long – allowing for differences in handwriting size. The frequency of linguistic features was calculated via unigrams (a linguistic unit of measurement which consists of a single item from a sentence). To put it succinctly, 1 word-occurrence equates to n=1 unigram. Comparatively (see *Table 3*), females used more: 2<sup>nd</sup> and 3<sup>rd</sup> person



pronouns, present tense verbs, cognitive process verbs and adverbs. Males, on the other hand, used more: words (overall), number of sentences, number of syllables, negation, negative affect, justification, adjectives, determiners and nouns. There was little to no gender difference in lexical density, use of 1<sup>st</sup> person pronouns, negative particles, asking for forgiveness, positive affect and (general) verbs. There were notable within-group differences between females however for: number of words and subsequent number of syllables, 2<sup>nd</sup> and 3<sup>rd</sup> person pronouns, negative affect, justification, present tense verbs, adjectives, adverbs and (general) verbs. There were also interesting within-group differences for males in use of: negation, adjectives, nouns and (general) verbs.

The following themes (affect, present tense verbs, pronouns, negation and cognitive process verbs) were extracted from the meta-analysis and will be explored to determine the extent to which participants' beliefs may influence pragmatic and deceptive written language.

### **i) Affect**

Overall, males used less positive affect, but more negative affect, compared to females. Research suggests that liars tend to use more negative affect whereas truth-tellers use more positive affect (Fornaciari & Poesio, 2013). Therefore, on the surface, males appear to be more deceptive than females, potentially due to males facing the extra challenge of having to linguistically construct a female. However, the majority of positive affect for both males and females were used when talking about Amy's children: "I want you to know I love you both so much, I always will" (1B), "it is because of my love I do this" (1B). Whereas negative affect was primarily used when describing suicidal ideation and personal, maternal failure: "I'm struggling to make ends meet" (2B), "I'm frustrated of being a single mother" (2B).

Though one might think that perceptions of selfishness may exhibit negative affect, and perceptions of selflessness may exude positive affect – which evidently did not happen – the resulting affect may actually affirm participants' beliefs. For instance, females expressing negative views of suicidal mothers may influence them to write positively and ensure their fictional children know they are loved – which is consistent with what the females stated in their interviews. Whereas for males, highlighting that suicidal mothers struggle to meet material needs may lead to them expressing more negative views, and focus particularly on personal failure. Contrastingly, males may have assumed females would hold a negative view regarding suicide (hence why they used more negative affect in their construction), which may be correct for the female participants in this study, but ultimately their different use of language to express these views potentially provides a linguistic 'tell' which could discern suicide note veracity, particularly if the authors are of different genders. This could be why males appeared to be more deceptive.

Furthermore, genuine suicide notes have also been found to use more positive affect, whilst simulated notes contain more negative affect (Ogilvie, Stone & Shneidman, 1966; Leenaars, 1988; Handelman & Lester, 2007). This then implies that female notes were more indicative of genuine maternal suicidal ideology, thus would probably be harder to detect in equivocal cases, but males were more in-line with non-suicidal ideology, potentially making their staged notes easier to detect.

In addition, Handelman and Lester (2007) concluded that positive affect was more characteristic of individuals who ‘completed’ suicide and negative affect better characterised those who ‘attempted’ suicide. The ‘attempters’ were supposedly more concerned about themselves and less concerned about others (Handelman & Lester, 2007), which bears some similarity with what the males expressed regarding suicidal internal reasonings. However, because females also shared these beliefs despite writing positively, and because males did not entirely avoid concern for others (“[y]ou deserve better than this and better than me” [2A]), it may be more accurate to suggest that males are to some extent aware of maternal ideology, but struggle to effectively integrate these gendered beliefs into their language, meaning their true gender may be discernible through their use of affect.

Moreover, there was a noticeable within-group difference for females’ use of negative affect. Participant 1B’s complete lack of negative affect could have been deliberate. She stated that: “[in a] genuine suicide victim’s mind ... it is selfless ... and that is what I think you would try to get across if you were going to try and stage that” (1B). Therefore, her prioritisation of positive over negative affect could have been used to try and avoid authorial detection. This however could demonstrate that affect, by itself, is not a reliable truth detector in staged suicide contexts, as she is actively using affect to her own advantage. On the other hand, this participant’s personal experiences of being a mother and with suicide (“looking at some friends of mine ... it’s incredibly damaging” [1B]), she may also in effect be incorporating these experiences into her writing. Affect would then need to be considered alongside other linguistic features to discern whether the author’s views are consistent throughout in order to assist investigators in equivocal suicide cases.

The other female participant and both the males however were more consistent in their use of positive and negative affect, which could indicate that they were more ambivalent regarding suicidal mothers. They may be prioritising both the negative view of self and the positive view of children, which possibly stems from either their religious or secular education. It may also suggest that, because both genders balanced self and children, maybe they both share the same social beliefs regarding suicidal maternal ideology – which is supported by both genders expressing relatively similar views regarding parental ‘failure’.

## ii) Present Tense Verbs

Females used more present tense verbs overall in their staged suicide notes than males did. This is consistent with prior research on deception, which implies that females were more deceptive than males (Argamon, Koppel, Fine & Shimoni, 2003; Fornaciari & Poesio, 2013). On the surface however, this could appear to be contradictory for both males and females when used in conjunction with their use of affect.

Mental representations that are based on actions written in the present tense tend to involve the internal stages of the action (Carrera et al, 2014). For example, “the constant struggle *has* finally battered be down” (1A) gives the readers a mental image that Amy has repeatedly been struggling, but up until now she has been successful in ‘getting back up’ as it were. Research has suggested that present tense verbs tend to focus the reader’s attention to specific detail, which blurs the overall message of the text, but generally perceives the target as more familiar (Carrer et al 2014). Therefore, because females used more present tense verbs than

males, females may arguably perceive the maternal ideology as more 'familiar' than the male participants, potentially due to social reinforcement and personal experiences. Additionally, by focusing on the children, females may be blurring the suicidal aspect of their note and Amy's role in it, as mentioned previously.

In support of this, because males used less present tense verbs overall, they may be linguistically collapsing Amy's actions into an abstract mind-set, which tends to construct written events as 'improbable' (Wakslak, Trope, Liberman & Alony, 2006; Wakslak & Trope, 2009): "If I were to read something like this ... I would question it" (2B). Furthermore, prior research has found that those who construct an abstract mind-set perceive social targets as less familiar than those who adopted a concrete mind-set as formed by the present tense (Stephan, Liberman & Trope, 2011). Adjectives have also been found to be the most abstract terms, which males used more of than females did (Carrera et al, 2014). Therefore, participants' use of present tense verbs may pragmatically elicit their perceived familiarity with motherhood, which may then coincide with their use of affect. However, this does not explain the deception element.

Perhaps then the reverse could be true. It may be that participants did not lie about their affect, but rather the information they included; thus, the deception may actually come from their unfamiliarity with maternal suicidal ideology. Carrera, Muñoz, Caballero, Fernández and Albarracín (2012) found that verb tense influenced the type of information used. Therefore, because females expressed much greater critical views of maternal suicide than males in their interviews, it is plausible that females may have had to lie more in order to construct a suicidal mother, as it is a substantially different ideology from their own.

Saying that, there was a large difference in usage between the female participants. Because participant 1B totally avoided negative affect in her note, she may be focusing on the more familiar aspect of Amy – the motherly side – whereas because participant 1A did not tactically avoid negative affect, her potential familiarity and critical perception of suicidal mothers may have collectively led to an increased level of deception in order to convey an ideology that was more in-sync with Amy's behaviour, but was exacerbated by the participant's own ideology leaking through.

Additionally, 1B omitting negative affect and prioritising the children is a form of deception, which could support the notion that the female participants were more deceptive than the males. This could also suggest a form of familiarity with maternal ideology because she arguably knew which aspect of motherhood to omit and which to prioritise as evidenced by her use of present tense verbs. She may then arguably be utilising gender norms for her own gain. Consequently, participants' affect may still hold semantic merit, but pragmatically, participants are deceiving their readers, which is identifiable through verb tense. Investigators would then need to look closer at how an author's affect is constructed, and not just rely on the overall sentiment of the text.

It is important to note though that the genre and context of a suicide note may have influenced participants to write in the present tense. However, the lack of past and future tense could affirm a lack of interpersonal experience and intrapersonal knowledge of the victim (in this case, Amy), which may have forced participants to write in the present or risk mentioning falsifiable historical information. Therefore, verb tense may be particularly pertinent in equivocal suicide cases.

### iii) Pronouns

Females used more second- and third-person pronouns than males; but both males and females had similar rates of first-person pronouns. This is largely consistent with previous research in fiction-writing, with the exception of first-person pronouns for which females tended to use more (Argamon, Koppel, Fine & Shimoni, 2003). The frequency of pronouns has been associated with strength of empathy and familiarity (Ickes, Stinson, Bissonnette & Garcia, 1990). For example, first-person plural pronouns (e.g. us, we) tends to signify author's thinking about relationships in a pluralistic, cooperative manner, meaning it is central and thus important to them (Agnew, Van Lange, Rusbult & Langston, 1998).

Interestingly, every participant only used first-person singular pronouns (e.g. I, me) – not a single first-person plural pronoun was used – which could provide a grammatical 'tell' of psychological distance between the participant, Amy and her children, despite their apparent affect and familiarity, because they are focusing primarily on the self: "I no longer want to live ... I want no future" (2B). This may have been influenced by participants trying to avoid mentioning Stephen within their note: "I didn't want this to come back on Stephen in evidence" (2B), "you'd be very careful to write it so not to draw additional attention" (1B). Therefore, participants may have feared discussing anyone other than themselves due to a lack of knowledge regarding these individuals, and the possibility of being caught, thus strictly focused on the self. This was particularly more pertinent for male participants, as they almost exclusively wrote in the first person. Therefore, this might support the idea that males are not as familiar with the maternal ideology compared to the females. It may also coincide with the potential self-focus when discussing internal reasoning – as mentioned previously in the male's use of an internal locus of control.

Additionally, second-person pronouns have been suggested to be palpable of 'being there', meaning female participants may have better embodied Amy than males by more effectively taking on an actor's perspective, whereas third-person pronouns have been found to be indicative of an external perspective, resulting in authors facilitating an observer's perspective (Brunyé, Ditman, Mahoney, Augustyn & Taylor, 2009; Hartung, Burke, Hagoort & Willems, 2016). However, the polarising linguistic effect of second- and third-person pronouns could imply that participants had a perspectival ambivalence about their role as both an offender and a victim, more so for females than males. This may originate from their internal contrast between duty of care and maternal 'failure'.

### iv) Negation

Males used more negation, which is inconsistent with prior gendered suicide research (Lester & Leenaars, 2016). This implies that males' construction was closer to a non-suicidal ideology than a genuine one. Additionally, deception research has suggested that liars use more negation than truth-tellers, indicating that males were more deceptive than females (Adams, 2002; Fornaciari and Poesio, 2013). However, this does not necessarily imply that males were more negative towards suicide than females – in fact, the reverse might be more accurate.

Negated sentences usually communicate a deviation from expectations by denoting an inversion or absence of concepts (Giora, 2006; Gkotsis et al, 2016). For example, "mommy can *not* bear it anymore" (1A) and "I *no* longer care" (2B) could imply that these participants would expect mothers to, in essence, be able to 'go on' and care

for their children – which is supported by their thoughts about what constitutes ‘good’ parenting. This also indicates that negated statements can indirectly purport and represent positive conceptualisations beneath their negative semantic meaning (Blanco & Moldovan, 2011). For instance, “I feel that I can *not* recover” (1A), and “it seems as if it is *never* enough” (1A) could suggest that participants actually think the reverse is true; that suicidal ideology is temporary, and thus ‘treatable’ (“I think ... they’re just seeking help” [2B], “I was assuming that Amy suffered a lot mentally” [2A]).

By using fewer negations, females may therefore have less pragmatic positivity regarding maternal ideology compared to males, potentially due to their overtly critical view of suicide. Comparatively, males may have more pragmatic positivity, leading to a greater use of negation in order to construct a suicidal individual that reflects their perception of a stereotypically depressed, hopeless individual. This may explain why males appeared to be more deceptive. Thus, negated sentences have the potential to reflect both the actual state of affair (or at least what the author wants to portray as the state of affair) and an author’s personal expectations; which itself provides insight into what social information an author possesses as well as how they comprehend it, albeit it positively or negatively (Kaup, Lüdtkke & Zwaan, 2006).

Moreover, by sharing these expectations through negation, an author is effectively acknowledging that, to an extent, their readers are pragmatically presupposed to expect, accept and understand these negated positives, potentially due to the pre-existing expectations regarding suicidal ideology that are present within society (Nahajec, 2012). Through echoing these existing beliefs, it arguably affirms that they are part of cultural and social norms and indicates that they are recognised as common notions (Nahajec, 2012). This is somewhat supported by participants’ shared portrayal of a depressed and internalised suicidal individual.

#### **v) Cognitive Process Verbs**

Females used more cognitive process verbs than males, which is consistent with both suicide and deception research (Fornaciari & Poesio, 2013; Lester & Leenaars, 2016). Cognitive process verbs are correlated with the understanding of mental states, which could be inferred as participants attempting to demonstrate a shared knowledge with, or perhaps an attempt to predict, Amy’s emotions in order to construct their version of a suicidal maternal ideology (Adrián, Clemente & Villanueva, 2007). One popular proposal is that socially shared information is frequently retrieved from memory and compared to presented exemplars, particularly if the presented information contradicts existing social beliefs, which results in either the reinforcement, or modification, of pre-constructed mental representations (Svenson, 1992; Holyoak & Spellman, 1993; Glöckner & Witterman, 2010). Thus, use of cognitive process verbs could arguably provide the most robust linguistic source to reflect participants’ inaccessible, internal perceptions regarding levels of familiarity with gendered suicide (Nelson et al, 2003).

On the surface then, it would appear that females demonstrate greater levels of familiarity with Amy compared to males as well as with genuine suicidal ideology. This familiarity is likely to come from shared understandings of maternal expectations and other socially embedded gender roles, whereas males may not have the same experiences or feelings of familiarity. Participants’ use of pronouns may support this idea, as females were better able to immerse themselves within

Amy's role, but males were much better at constructing an outsider's perspective. Conversely, there were very few cognitive process verbs used by either gender which may actually indicate a lack of familiarity for both. For example: "I *think* you will be better off without me" (1A) could signify an air of uncertainty, possibly because participants are ultimately unsure about what suicidal mothers are thinking, evidenced by their speculations and assumptions surrounding internal suicidal thoughts.

However, this may also be another pragmatic deception. Understanding the suicidal maternal ideology is unlikely to, and – when combined with other linguistic features – is evidently not, sufficient enough to 'accept' the behaviour. Thus, though females may have supposedly greater shared understanding of motherhood, they may be over-emphasising its use to compensate for their negative views on maternal suicide in order to construct a 'loving' mother. Therefore, placing too much emphasis specifically on a positive maternal ideology may actually provide yet another linguistic 'tell' of a false suicidal ideology as it may underemphasise the morally and socially ambivalent views that suicidal individuals themselves may hold (Leenaars, 1988).

### **Limitations & Future Research**

Despite the fact that these findings may have provided new insights and understanding regarding staged suicide, the current investigation has some weaknesses which need to be considered. First, given the ethical difficulties in procuring a large sample size, this study's small sample, though arguably common for qualitative research, limits the ability to explore gender and genuine-staged similarities/differences to its full extent. Therefore, extension and replication on a much larger scale is needed to determine the generalisability of the results. Second, with the exception of gender, no other moderating variables were examined – such as age – which limited the researcher's ability to better understand how other factors may affect staged suicide notes. Future research should then explore other relevant variables. Third, the 'Stephen-Amy' scenario, though designed to protect participants from harm, may have inadvertently affected the content of participants' notes, thus lacking ecological validity. However, extracted linguistic features and latent topics regarding participants' preconceptions of suicide may still hold some ecological merit. Nonetheless, future research may benefit from allowing participants free range in their writing so not to mislead them. Alternatively, using different staging scenarios could also elicit interesting differences. Saying that, as this study is the first to explore gender construction in staged suicide notes, the findings provide a solid foundation to build on.

### **Implications**

Despite these methodological limitations, the findings may still improve equivocal suicide investigations. Without first gathering knowledge regarding participants' beliefs and expectations surrounding gendered suicide, their use of language could have been interpreted very differently. Therefore, by using qualitative analysis in cooperation with quantitative linguistic feature extraction to analyse suicide notes, investigators may be better able to discern staged from genuine suicide notes by exploring whether language-use matches pragmatic undertones. Not only would this better identify offenders who would otherwise likely have had gone unnoticed, but, by improving investigatory procedures of staged crimes, victims' families may be

provided with more closure than if they were left to believe the victim committed suicide; particularly if the victim had children. Outside of forensics, improved understanding of the extent society can have on the internalisation of suicidal 'norms' may contribute to better media representations, possibly reducing the perpetuation of negative stereotypes, and assist in the development of programmes intended to prevent suicidal behaviour.

## Conclusion

The aim of the current study was to explore how males and females linguistically construct a fictitiously staged suicidal persona. This was done by investigating whether participants' pre-existing stereotypes regarding gender and suicide would impact the content and structure of their written note. As was expected, extracted linguistic features from both males and females overlapped with prior deception and gendered-suicide linguistic research, and was generally consistent with gender preferential language-use.

Both males and females primarily looked 'inwards' to find fault with suicidal ideology, though they did not discount the effect that external factors may have. This is reliable with simulated suicide note research, implying that non-suicidal individuals tend to attribute suicidal ideology internally, possibly because non-suicidal individuals lack the associated mental experience. This was reflected though participants' notes as they prioritised a sense of personal failure on behalf of Amy.

Females used more positive affect, present tense verbs, pronouns and cognitive process verbs than males in their staged notes. Semantically, these features suggest that females may be aware of the social and cultural expectations placed on mothers, and females in general, because the female participants expressed a supposedly high level of familiarity with Amy and her children. This was supported by females discussing their views on (what they deemed) appropriate and 'normal' parenting behaviour and ideology, probably derived from the social reinforcement of gender roles.

However – with the exception of positive affect – present tense verbs, pronouns and cognitive process verbs overlap with deceptive language use, which could imply that, pragmatically, females were actually deceiving their readers. This 'familiarity' then appears to be purposively constructed by the female participants, likely because their own motherhood ideology significantly differed from their perception of a suicidal mothers' ideology – which they unanimously considered to be inferior to their own. It is possible that females knew which part of the suicidal motherhood ideology to re-construct to be more in-line with their own (resulting in females sounding semantically familiar) because of their shared knowledge and personal experiences regarding gender expectations. This is also likely due to the perpetuation of negative stereotypes found within contemporary media representations of suicidal individuals. More so for its proclivity to over-report female suicide and under-report male suicide. It is then fair to suggest that public perceptions of suicide are socially misguided. This could have led to a differential internalisation and subsequent inference of gendered suicide, which itself has been socially mediated by gender.

Males, on the other hand, used more negation and negative affect, which, again, is consistent with deceptive language-use. By using the same linguistic features as females, and referring to the same internal, depressive state as females, but with fewer occurrences, this could indicate that males shared external familiarity and social understanding of Amy and suicidal motherhood ideologies, but their lack of intrapersonal knowledge regarding female expectancies might have led to an alternate construction of what they believed to be an accurate suicidal maternal ideology. Therefore, by using different deceptive linguistic tactics to construct their version of Amy, this ultimately suggests that gender can be linguistically constructed in multiple ways, and, evidently, suggests that these constructions are based on, or at least influenced by, an author's social beliefs and values. This insight may provide valuable assistance in the examination of equivocal suicide notes.



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