THE LINK BETWEEN DEPRESSIVE SYMPTOMS AND GUILT INDUCTION, AND THE SUBSEQUENT EFFECTS ON PARTNER ACCOMMODATION AND TOLERANCE OF INTIMATE PARTNER VIOLENCE

BY

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A thesis

submitted to the Victoria University of Wellington in fulfilment of the requirements for the degree of

Masters of Science

In Psychology

Victoria University of Wellington

2020

Acknowledgements

I want to firstly say a huge thankyou to my supervisor Dr. Matt Hammond, I have learnt so much throughout this process and truly enjoyed working with you. My imposter syndrome has been kept at bay only by the confidence and respect that you have shown towards me and my ideas throughout this process, which I greatly appreciate. I look forward to keeping tabs on your research in the future – I know there are going to be many exciting things to come!

Also to Poppy and Lucy, thankyou so much for giving up your own time to help me with coding, and putting up with many technical difficulties!

I would also like to say thank you to my incredibly clever and kind sister Victoria, for all of her support and guidance, especially in these last few weeks. I am aware of how lucky I am to have such a superb sibling - well-done big sister! And lastly, to my wonderful (pa)rents Judy and Mark, thank you for the support in every aspect of my life throughout my university career, and providing encouragement when I lacked the motivation to persevere. I am really pleased to have accomplished what I have, and I would not have done so without you and your sage advice.

Statement of Authorship

The key ideas and goals for this research were conceived by Bryony Harrison. Dr Matt Hammond designed and collected data for Study 1. Bryony coded the video recordings, then analyzed and interpreted data for the research. Study 2 was a survey contributed to by Dr Louise Dixon, Manuri Ranasing and Bryony Harrison. Data analysis and interpretation was also carried out by Bryony Harrison. Bryony then wrote the thesis, completing all first drafts and final versions. Dr Matthew Hammond provided help with the statistical analysis and interpretation, as well as critical feedback and editing throughout the writing of the manuscript.

Abstract

Guilt induction is a behaviour involving exaggeration of hurt feelings to elicit guilt in an intimate partner, and thus elicit a reassuring and loving response. This thesis investigates whether greater depressive symptoms are linked with use of low level, everyday guilt induction. We also examine the possibility that guilt induction elicits commitment-driven maintenance behaviour from partners, including accommodation (e.g., smiling, providing encouragement) but also increased tolerance for intimate partner violence. We tested a mediation model in which higher depressive symptoms predicted greater of guilt induction, which in turn predicted greater partner accommodation (Study 1) and tolerance of intimate partner violence (Study 2). We assessed observer-coded guilt induction behaviours in a dyadic study (Study 1; 152 couples) and experiences of partner guilt induction in self-report questionnaires (Study 2; 217 individuals). Depressive symptoms predicted greater use of guilt induction (Study 1), and perceptions of partner's depressive symptoms predicted more experiences of partner guilt induction (Study 2), suggesting that individuals higher in depressive symptoms experience insecurities consistent with motivations to guilt induce. Guilt induction predicted greater use of immediate partner accommodation (Study 1), and experiences of guilt induction predicted greater tolerance for one of four forms of intimate partner violence (Study 2). This suggests that guilt induction elicits accommodation of negative behaviours, including tolerance of certain types of intimate partner violence. An additional analysis highlighted a change in partner behaviour from increased accommodation when guilt induction initially occurred, to relatively decreased accommodation at the following time point, 30 seconds later (Study 1). This research supports and expands on prior theory suggesting people higher in depressive symptomology tend to use strategies to gain reassurance and care that can ultimately backfire.

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The Link between Depressive Symptoms and Guilt Induction, and the Subsequent Effects on Partner Accommodation and Tolerance of Intimate Partner Violence

The act of inducing guilt in one's partner is a common yet potentially harmful behaviour within intimate relationships (Vangelisti et al., 1991). Guilt induction involves exaggerating expressions of hurt in order to elicit guilt in an intimate partner, which results in commitmentdriven, caring behaviour from that partner (Overall et al., 2014). Vangelisti et al. (1991) identified how the more intimate a relationship is, the more that guilt induction appears be used in discourse. Whilst guilt induction may be consciously or subconsciously used with the goal of attaining desired commitment from a partner, it appears that there are associated costs to doing so, including unaddressed issues and partner dissatisfaction (Overall & McNulty, 2017). Guilt inducing strategies are generally used by people with relationship insecurities, such as individuals higher in attachment anxiety (Overall et al., 2014). This is due to their heightened need to maintain closeness and receive affirmation of commitment from a partner. Conceptual similarities such as a constant need for reassurance, suggest that theoretically it should not only be more anxious individuals, but also those higher in depressive symptoms who are likely to become insecure and guilt induce (Joiner & Coyne, 1999). Guilt induction is a pertinent communication behaviour to investigate in regards to associated partner outcomes, and in the context of depression to uncover how these might correlate. In the current research, we will examine whether there is a significant link between higher levels of depressive symptoms and the use of guilt induction by individuals in intimate relationships.

Prior research suggests that people who enact guilt inducting behaviours will provoke their partner to behave in more commitment-driven, positive ways. When an individual emphasises feelings of hurt toward their partner, or perceived lack of commitment, it is likely

that this will prompt that partner to behave in ways that restore relationship stability (Overall et al., 2014). This relationship maintenance is referred to as accommodation—relationship behaviours involving positive and constructive responses to a destructive behaviour (e.g., sulking and emphasising hurt) rather than reciprocating with destructive responses (Rusbult et al., 1991). Research on accommodation typically identifies the positive effects on intimate relationships (Gottman, 1998; Rusbult et al., 1991; see Overall & McNulty, 2017 for exceptions). However, although some negative consequences have been identified for a partner using accommodation (Impett et al., 2012), no research has tested the more diffuse consequences potentially associated with accommodating guilt induction. This thesis will address these gaps in existing research on the specific behavioural and psychological consequences of guilt induction for a receiving partner. We will also examine whether guilt induction is associated with more partner accommodation, and if this may be accompanied by an increased tolerance for intimate partner violence. Studying the psychological processes that underlie accommodating physical aggression has important implications for understanding why people may remain in violent relationships (Arriaga et al., 2018).

Communication Behaviours in Romantic Relationships

Quality of communication between partners is a vital component to the success and longevity of an intimate relationship (Fletcher et al., 2013; Meeks et al., 1998; Overall et al., 2009). Effective communication enables partners to provide and receive support within a relationship, which is associated with positive individual and relationship outcomes, such as greater marital satisfaction and lower levels of depression (Gardner & Cutrona, 2004; Julien et al., 2003). Partner support can be active and direct, for example giving advice, or passive in the

form of providing comfort, yet both require effective communication skills (Fletcher et al., 2013).

Communication is also vital for partner regulation which involves efforts from an individual to try and improve and enhance a relationship by changing problematic partner behaviour (Fletcher et al., 2006; Overall et al., 2009). This is a common occurrence in intimate relationships, in which communication is essential to this regulation as it enables partners to express their dissatisfaction or satisfaction with certain behaviours. Different ways of communicating will have different regulation effects. Direct strategies, such as nagging or explaining a concern, may have a potentially unpleasant immediate effect due to their confrontational nature, however can lead to successful improvement of communication over time in comparison to indirect strategies (Overall et al., 2009). Communication also becomes particularly pertinent in times of relationship stress. Positive communication is associated with productive maintenance of relationships and conflict resolution, while lack of communication or harmful negative communication is likely to cause further relationship stress (Karney & Bradbury, 1995).

Whilst there is a clear theoretical perspective on communication and why it is needed in intimate relationships, what remains unclear is what exactly constitutes 'positive or negative, or colloquially, 'good' or 'bad' communication? An influential typology of communication strategies is the "Exit, Voice, Loyalty and Neglect" framework coined by Rusbult et al. (1982), since reconceptualised by Overall et al. (2009). This is a dimensional model of communication strategies encompassing orthogonal dimensions of directness (direct/indirect) and valence (positive/negative; see Figure 1).

Negative-direct behaviours (exit) are direct responses to relationship stress that include placing blame on a partner, creating demands with no compromise and threats of dissolution (Overall et al., 2009). Positive-direct behaviours (voice) include direct responses to relationship stress that include voicing concerns, making efforts to reconcile differences, and providing information or alternative perspectives for a partner. Positive-indirect (loyalty) behaviours include minimising problems and avoiding conflict as opposed to actively engaging and usually involves use of positive affect and humour to diffuse problematic situations or overlook negative partner behaviour. Negative-indirect (neglect) behaviours are also passive responses to relationship stress, including avoidance and emotional withdrawal from a partner, without providing opportunity for partner to meaningfully communicate.

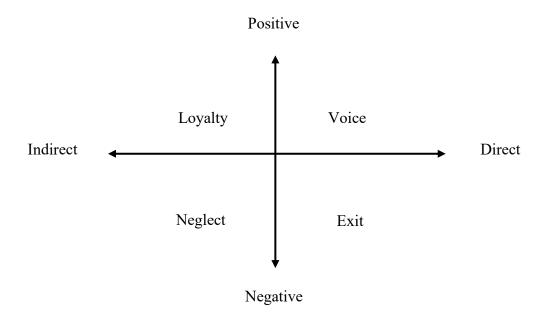


Figure 1. The EVLN typology of communication (Rusbult et al., 1982).

Initial research on communication in relationships suggested that negative communication strategies are highly destructive for relationships. Karney and Bradbury (1995) conducted a meta-analysis which found links between negative communication behaviours such

as invalidation and withdrawal, and relationship dissatisfaction or dissolution. Further research expands on these findings, with hostile communication behaviours being found to diminish relationship satisfaction, and result in a negative reciprocal cycle that is difficult to break (Gottman, 1998; Kluwer & Johnson, 2007; Wiess & Summers, 1938). This cycle occurs as negative communication behaviours are likely to be met with equally negative behaviours from a partner, resulting in a continuous cycle of negativity which can lead to dissolution unless one partner is able to 'break the cycle' and respond positively (Gottman, 1998). Communication behaviour with less aggressive influence strategies such as validation or use of humour or affection to avoid or reduce conflict, is instead associated with positive relationship outcomes (Karney & Bradbury, 1995). This includes using positive affect to soften conflict interactions and de-escalate conflicts which can lead to resolutions, and subsequently improved relationship satisfaction (Gottman 1998; Wiess & Summers, 1938).

A more recent theoretical approach identifies that 'positive' and 'negative' behaviours each have a different pattern of costs and benefits, which can be dependent on contextual factors. McNulty and Russell (2010) conducted a review of this literature, indicating that while negative behaviours (blaming, derogating and demanding) may have immediate negative effects on relationship satisfaction, in the long term there can be positive effects such as higher relationship satisfaction. For example, a severe issue such as partner drug use may require the use of negative communication strategies in order to elicit the required change. A stronger partner motivation to change in the face of negativity, can ultimately result in less conflict and higher satisfaction, showing the adaptive nature of the negative communication. McNulty and Overall (2016) similarly established that positive behaviours (agreeableness, humour, affirmation) had both positive effects of increased satisfaction in the short term, and negative

effects of undermining satisfaction and stability in the long term, due to a lack of negative feedback and thus motivation for partner change. These findings indicate that negative and positive behaviours can exhibit both costs and benefits, depending on the severity of an issue or context in which the behaviour is occurring (McNulty & Overall, 2016; McNulty & Russell, 2010). Contextual factors could include the different motivations that an individual might have to behave negatively, how vulnerable they are in the relationship, the necessity of change in the relationship and even the temporal distance from a behaviour. This research highlighted the importance of taking into account contextual factors when looking at interpersonal behaviours such as guilt induction, which has potential costs *and* benefits in different relational contexts.

Guilt Induction

Guilt induction is the interpersonal behaviour of exaggerating expressions of hurt feelings to induce guilt in a partner, thereby prompting them to be responsive and caring (Lemay Jr et al., 2012; Overall et al., 2014). Guilt induction encompasses exaggerating expressions of hurt (sighing, sulking), emphasising the negative impact of a partner's actions on themselves and their emotional wellbeing, and appealing to a partner's love, concern and obligation to them (Overall et al., 2014). To illustrate, imagine that Sally asks Roger to help her with a work problem but Roger does not immediately assist as he is tired from a big day at work. Sally says "Ok, I just *thought* I could count on you for this", appearing to be very hurt. Roger then feels guilty so quickly goes to assist her, reassuring her of his love and affection.

In relationship research, tactics that comprise elements of guilt induction have been studied widely, such as manipulation and supplication (often referred to as influence tactics). In the relationship context, manipulation occurs when one individual influences or exploits another individual's beliefs or behaviour in order to benefit themselves (Austin et al., 2007: Buss, 1987;

Van Dijk, 2006). For example, if Sally wanted to go on a date night but Roger was tired, she might manipulate Roger into going by saying "I just don't feel like you are committed to making this relationship work, otherwise you would be wanting to make me happy by doing this". Supplication involves using emotional over-expression and debasing oneself, alongside emphasising negative consequences of a partner's behaviour, in order to appear weak and thereby influence their partner (Howard et al., 1986; Overall et al., 2009). For example, an individual may sulk and cry when they are asked by a partner to do something and say "I can't do this, I am so stupid", prompting a comforting response.

Both supplication and manipulation share similarities with guilt induction, such as an overall aim to benefit oneself (manipulation), and appearing more needy (supplication) to one's partner, however there are also key differences. Guilt induction and supplication differ in that the focus for guilt induction is to get a partner to be more caring and reassuring in an effort to absolve themselves of guilt. By contrast, supplication focuses on making oneself appear weak, but with no clear message on how a partner might change, or provide help. In addition, there are distinct aspects of manipulation which would not be indicative of guilt induction as it is understood in this paper, for example insulting and degrading one's partner in order to get them to do something you want (Buss, 1992).

Guilt induction fits within the communication strategies dimensional framework, as a negative, and predominantly indirect behaviour (however some instances of voicing concerns in order to appeal to a partner's concern could be considered more direct). An expression of hurt feelings signals a high level of dependence and commitment, which triggers pro-relationship motivations in a partner, as exemplified by feelings of guilt and caring behaviour (Baumeister et al., 1994; Overall et al., 2009; Overall et al., 2014). Partners can be prompted to provide much-

needed reassurance to their partner through guilt induction, and it may be more effective in motivating a partner to respond positively as an indirect, non-confrontational behaviour.

Lemay Jr et al. (2012) explored motivations, mechanisms and possible outcomes of guilt induction. As feelings of hurt are often felt in conjunction with anger, the authors felt it necessary to distinguish these feelings from each other as having different social functions and consequences. Hurt feelings following a relationship threat resulted in a constructive response from a partner, due to the perpetrator feeling committed to repair the relationship following feelings of guilt and empathy. This is consistent with theory that suggests hurt feelings are indicative of dependence and vulnerability, whereas feelings of anger were instead met by perpetrators displaying destructive relationship behaviours. Research by Overall et al. (2014) examined the specific relationship between attachment and guilt induction, to establish whether attachment anxiety was consistent with motivations to guilt induce. Findings indicated that individuals higher in attachment anxiety, tended to use more guilt induction, particularly in times of conflict where there was an immediate relationship threat. This study illustrates how people with greater insecurity about attaining love tend to engage with guilt inducing strategies because they fulfil their desires for reassurance indirectly.

While guilt induction may facilitate positive outcomes for an insecure individual, there are potential negative outcomes for the partner, most notably decreased relationship satisfaction (Overall et al., 2014). Even if a partner is outwardly providing the desired love and affection, evidence suggests that internally partners may begin to harbour negative feelings about the behaviour (Baumeister et al., 1995). Guilt is a strong negative emotion and if an individual is deliberately being made to feel guilty to benefit their partner, they will inevitably grow to resent that partner, and start to foster a negative view of them (Baumeister et al., 1994; Rubin &

Shaffer, 1986). Furthermore, prior research has shown that within intimate relationships, people grow tired of constantly having to exaggerate their love and affection to satisfy a partner who relentlessly seeks reassurance (Katz et al., 1999; Lemay and Dudley, 2011). These outcomes associated with guilt induction provide potential explanations for why declines in partner relationship satisfaction are seen (Overall et al., 2014).

Are Depressive Symptoms also linked with Guilt Induction?

Prior research illustrates how attachment anxiety can lead to greater use of guilt inducing strategies, however their reasoning also suggests that symptoms of depression may be related to guilt induction. Depression is a pervasive mood disorder which has long been associated with relationship insecurities and poor emotional disclosure (Sharabi et al., 2016). Symptomology such as depressed mood and feelings of worthlessness (Fried & Nesse, 2015), lend themselves to insecurity in both the self and relationships, which results in poor relationship satisfaction, emotional distress and more interpersonal problems (Coyne, 1976; Mufson et al., 1999; Shaver et al., 2005; see review by Whisman & Kaiser, 2008).

A series of developmental studies looking at guilt induction in parent-child relationships have provided a convincing basis for this possible link between depressive symptoms and guilt induction in romantic relationships (Donatelli et al., 2007; Rakow et al., 2009; Rakow et al., 2011). Donatelli et al. (2007) investigated possible links between maternal history of clinical depression and increased use of guilt induction, finding that adolescents whose mothers had a history of depression, reported more maternal guilt induction than those with non-depressed mothers. This guilt induction manifested as both direct criticisms, and self-serving elicitation of guilt to make an adolescent stay with them/give them attention. Rakow et al. (2009) also investigated the relationship between parental guilt induction and current parental depressive

symptoms. Findings indicated that parents exhibiting depressive symptoms enacted more guiltinducing behaviours when parenting their children, such as expressing more disappointment and unwarranted blame (Rakow et al., 2009). This indicates a common pattern of increased guilt induction behaviours in both clinically depressed parents, and parents higher in depressive symptoms. Increased guilt induction and subsequent guilt felt by children predicted maladaptive behavioural outcomes such as greater internalisation of problems (Donatelli et al., 2007; Rakow et al., 2009). Insecurities associated with depression may explain this relationship between higher parental depressive symptoms and more guilt induction such as feelings of being "abandoned" or "unwanted" by their child, thus needing more reassurances of love. These are insecurities that often occur within intimate relationships as well, and it seems likely that an individual higher in depressive symptoms might also use this strategy on an intimate partner. Thus our study will build on these existing findings to see if this theoretical link between depressive symptoms and guilt induction extends to romantic relationships. We expect that some of the same processes resulting in the use of guilt induction, will occur for individuals with higher depressive symptoms in their intimate relationships, because of the similarities in dependency and attachment of romantic relationships and parent-child relationships.

Intimate partner research shows that people higher in depressive symptoms are also particularly sensitive to rejection, and expect people to reject them (Ayduk et al., 2001). This is often problematic in a relational context, and can lead to individuals behaving in certain ways that push others to reject them, an example of this is "excessive reassurance seeking" (Joiner et al., 1999; Joiner & Coyne, 1999; Starr & Davila, 2008). Excessive reassurance seeking involves an individual consistently asking for assurances of love and self-worth from their partner, even if reassurance has already been given (Katz et al., 1999). This is to ease their own insecurities and

depressed mood, however unsurprisingly, this persistent behaviour can lead to partner frustration, as their assurances are doubted or discounted when given. An ensuing negative cycle of partner withdrawal, can lead to further depression in the individual seeking reassurance, and more relationship dissatisfaction for the partner (Shaver et al., 2005). Evidence even suggests that excessive reassurance seeking can result in the highly negative interpersonal outcome of causing depression in the partner (i.e., depression contagion; Katz et al., 1999; Shaver et al., 2005).

This interpersonal cycle shares conceptual similarities with that of guilt induction. Individuals who guilt induce perceive their partners to not be giving enough love, but by using guilt inducing behaviours on them to elicit expressions of concern/love, in the long term can actually push their partners away, therefore ultimately undermining their source of love and care (Overall et al., 2014). As characteristics of depression indicate that more reassurance and care is needed from loved ones, theoretically it seems likely that guilt induction would be a strategy that individuals experiencing higher depressive symptoms may adopt. Interestingly, despite a wealth of research focusing on excessive reassurance seeking, guilt induction, which has common attributes of seeking comforting from a partner, albeit in a different way, has not been taken into account in prior research.

Guilt induction is an indirect strategy of obtaining reassurance from an intimate partner, while excessive reassurance seeking is more direct (e.g., repeatedly asking a partner to say "I love you"). Some research suggests that anxious individuals are more likely to use more indirect support seeking than direct-verbal support seeking, which indicates a preference of indirect reassurance seeking in insecure individuals (Collins and Feeney, 1988). It seems likely that individuals higher in depressive symptoms, who also suffer from relationship insecurities may be

more comfortable seeking affirmation from their partner in an indirect way as opposed to direct. Guilt induction could provide an indirect pathway to gaining love and reassurance that eases insecurities associated with directly asking for love, such as appearing needy or fear of blatant rejection. Thus there is theoretical reasoning to examine depressive symptoms and guilt induction, namely to see whether this more subtle form of getting reassurance is also employed by depressed individuals to get love.

As well as the strong theoretical support for a correlation between depressive symptoms and guilt induction, there is also a practical rationale for looking at this link, which is to better understand behavioural factors of depression. Indeed, if there is a relationship between depressive symptoms and guilt induction, this could offer more of an understanding as to why relationship problems may be occurring in people suffering from depression, and provide an opportunity to mitigate negative consequences of this behaviour.

If there is indeed a substantial link between higher depressive symptoms and more guilt induction, there is also research to suggest that partner outcomes may range from simply being more reassuring and accommodating, to tolerating highly negative behaviours due to guilt. Depressive symptomology and notably low self-esteem, which is highly correlated with depressive symptoms – has been consistently linked to greater tolerance of negative partner behaviour, including intimate partner violence (Cascardi & O'Leary, 1992; Katz et al., 1997; Lewis & Fremouw, 2001). We believe that the mechanism by which depressive symptomology could predict greater tolerance of negative partner behaviour and even intimate partner violence could be guilt induction.

Consequences of Guilt Induction: Accommodation and Tolerating Violence?

What are the consequences of guilt induction? We propose that feelings of guilt in an intimate partner will increase positive behaviours in response, such as "accommodation", which is a willingness to respond to negative behaviour by a partner in a constructive and positive way (Finkel & Campbell, 2001). However, we also propose that the use of guilt induction, may ultimately have a dangerous consequence of increasing partner tolerance for intimate partner violence.

Accommodation is also operationalised within Rusbult et al.'s (1982) Exit, Voice,
Loyalty, Neglect framework of communication processes (Rusbult et al., 1991). Accommodation
is characterised by being a constructive response to negative behaviours as opposed to the
instinctively reciprocal destructive behaviour. Destructive behaviours include negative-indirect
and negative-direct behaviours (exit and neglect), while constructive, pro-relationship behaviours
are positive-indirect and positive-direct (voice and loyalty). Realistically, every individual in a
romantic relationship will behave poorly within the relationship at some stage. Therefore it
corresponds that every individual in a relationship will have to respond with accommodation at
one point, otherwise relationship dissolution would become inevitable (Fletcher et al., 1999). For
example, Sally gets home from a particularly bad day at work and takes it out on her long-term
partner Roger by criticising everything he does. Despite this being aggravating to Roger, he
inhibits his natural response to respond equally negatively by criticising her and instead responds
by asking her how he can help her to feel better after an evidently bad day.

As guilt induction functions to elicit professions and acts of commitment from a partner, and commitment has previously been identified as an underlying motivation associated with accommodation. It seems likely that behaviours which lead to guilt in a partner are likely to result in that partner displaying higher accommodation, as this is a commitment driven, pro-

relationship response ensuring relationship stability. This key component of commitment suggests a theoretical link between guilt induction and partner accommodation. However although there is extensive research on both guilt induction and accommodation respectively, there is a gap in the literature specifically looking at the relationship between the two processes.

Many benefits have been associated with use of accommodation in intimate relationships. Responding constructively to destructive behaviours facilitates de-escalation of conflict and increases relationship satisfaction and longevity (Gottman, 1998; Rusbult et al., 1991; Rusbult et al., 1998). This is likely due to accommodation resulting in increased perceived commitment and trust (Wieselquist et al., 1999). Despite the wealth of evidence signalling the important benefits of accommodation in intimate relationships, there are also some important potential costs associated with this behaviour. Accommodation of destructive behaviour can have personal costs, especially in the context of a relationship where the accommodation is not mutual (Rusbult et al., 1991; Rusbult; Yovetich & Rusbult, 1994). This is likely due to one partner having to constantly suppress their own emotions, for the good of the other individual, with no reciprocation (Impett et al., 2012; Rusbult et al., 1991). A study by Impett et al. (2012) looked at the consequences of emotional suppression during sacrifice within an intimate relationship. Findings suggested that suppressing emotions to benefit a relationship is associated with lower psychological well-being, and less satisfaction with life, due to a lack of authenticity felt in their relationship interactions. Furthermore, despite emotion suppression often being intended to deflect conflict, it was found to ultimately lead to more conflict which presents costs to the relationship as well.

A potential cost of accommodation that has not yet been explored is whether accommodation of negative partner behaviours such as guilt induction, could eventually shift to

tolerating negative behaviours as severe as intimate partner violence. Intimate partner violence can refer to different forms of aggression (physical, sexual and psychological), directed towards a current or past intimate partner (Dixon & Graham-Kevan, 2011). In this research the main form of intimate partner violence that we examine is physical aggression (e.g. punching/slapping one's partner), although we also observe 'partner aggression' which is a form of intimate partner violence involving verbal abuse and threats of violence, which can be just as detrimental as the physical intimate partner violence (Pico-Alfonso et al., 2006). Victims of intimate partner violence unsurprisingly suffer from severe declines in relationship satisfaction as well as the ensuing psychological effects, such as symptoms of anxiety and depression, substance abuse and suicidal thoughts (Caldwell et al., 2012; Katz et al., 2002; Pico-Alfonso et al., 2006; Stein & Kennedy, 2001; Williams & Frieze, 2005).

Accommodating negative behaviour within a relationship has been identified as a common, and perhaps inevitable communication process within a relationship, with both positive and negative relationship outcomes. However, it is evident that tolerating intimate partner violence is not healthy for an individual or a relationship. Prior research suggests that the wider and individually held beliefs associated with accommodation are also associated with an individual's tolerance and downplaying of intimate partner violence.

A recent review by Arriaga et al. (2018) explored the relationship between relationship commitment and partner aggression, results identified that relationship commitment driven beliefs were linked with down-playing aggression by a partner. These beliefs were accompanied by factors such as joint friends, extended history together and daily relational routines.

Downplaying of partner aggression involved brushing things off as a 'joke' or attributing it to other external problems such as substance problems/stress (e.g., laughing off a hurtful insult or

saying "Oh they've just had a long day!"), and even accepting responsibility for an abusive behaviour. Strongly committed partners appear to accommodate destructive behaviour from their partner, and justify the behaviour to such an extent that they react constructively, in order to continue in the abusive relationship. Another review by Dare et al. (2013) explored why women stay in both verbally and physically abusive relationships, and identified the same themes of commitment based behaviours and responses allowing for an escalation of abuse. This review additionally identified a desire for consistency as a predictor for greater tolerance of intimate partner violence, this need for consistency shares conceptual goals of accommodation, and wanting to ensure relationship stability. Thus indicating another theoretical link between motivations to accommodate and to tolerate intimate partner violence.

This consistent occurrence of commitment based motivations for staying in abusive or unhealthy relationships within the research, exemplifies a significant potential risk of guilt induction and accommodation within intimate relationships. Whilst physical abuse is distinct from the negative behaviours that most couples will accommodate, this theoretical evidence suggests similar attitudes and motivations can be held for accommodation and tolerance of physical aggression and violence. Thus the relationship between partner guilt induction and tolerance for intimate partner violence is an important next step in our research.

In summary, existing findings have identified accommodation as a key communication process in intimate relationships, which involves the use of relationship stabilising behaviour in response to destructive behaviour from a partner (Finkel & Campbell, 2001; Vohs et al., 2011). This behaviour has been well established as a pro-relationship behaviour that is beneficial to the satisfaction and success of a relationship. The potential costs of accommodating negative behaviour have also been identified, however what remains unclear in the literature is whether

accommodation may interact with a higher tolerance for intimate partner violence. Despite the fundamentally similar factor of accepting negativity, along with shared commitment based motivations, there has not yet been a study directly testing this. Such a study would provide useful insight into the extent to which guilt induction may impact an intimate partner- could this include increasing tolerance for not only general negative behaviours but physical abuse?

Current research

The current research addressed whether depressive symptoms was linked to guilt induction, and what specific partner outcomes may be associated with this behaviour in intimate relationships. We were particularly interested in expanding upon the existing research by Overall et al. (2014). Our review of the existing literature has highlighted how individuals with relationship insecurity, such as those suffering from depression, may feel the need to consistently induce guilt in their partner to reaffirm commitment and affection. This is an interesting and important expansion on the existing research, and a natural next step due to the similarities in relationship insecurity in those both suffering from anxiety and depression. In addition, there is also rationale to look at the relationship between guilt induction and accommodation. Based on the prior research explaining accommodation to be a pro-relationship behaviour rooted in commitment to a relationship (Gottman, 1998; Rusbult et al., 1991) it seems likely that guilt induction could lead to the receiving partner displaying higher accommodation, as the aim of guilt induction is to ensure commitment and relationship stability. However there is no research directly linking these two behaviours.

To address these gaps in existing research, our study will look at the relationship between depressive symptoms and guilt induction, and whether more guilt induction elicits greater accommodation. Study 1 will include an existing sample of romantic couples, who have

previously completed a measure of depressive symptoms and engaged in a video-recorded communication game. Whilst an existing coding scheme for accommodation will be used, we will construct a novel observational coding scheme for guilt induction, which accounts for low-level guilt induction behaviours that are likely to occur in everyday interactions.

Theoretically, we expect that individuals higher in depressive symptoms will have more relationship insecurities, thus making them more likely to engage in indirect strategies such as guilt induction, to attain love and relationship security. This is also partly based on findings from developmental studies by Donatelli et al. (2007) and Rakow et al. (2009) which found that depressive symptoms correlate with guilt inducing strategies in parent-child relationships. We expect that the same pattern will occur for individuals with higher depressive symptoms in their relationships because of the similarities in dependency and attachment of romantic relationships and parent-child relationships. As a result, we hypothesise that individuals higher in depressive symptoms will be more likely to engage in guilt inducing strategies (*Hypothesis 1*). Research on guilt induction suggests that it is a somewhat destructive behaviour aims is to obtain reassurance and commitment to a relationship, which is in line with the theory for why people accommodate in relationships (Fletcher et al., 1999). This provides theoretical rationale for a relationship between guilt induction and partner accommodation. Thus we also hypothesise that guilt induction will lead to more partner accommodation (*Hypothesis 2*).

Study 2 of this research will also address Hypothesis 1, but as a non-dyadic study it will instead assess perceived partner depressive symptoms, and experiences of partner guilt induction. We will also investigate whether greater experiences of partner guilt induction will predict more tolerance for intimate partner violence. Study 2 will use a new sample of individuals who identify as either currently being in, or previously having been in a long-term

romantic relationship. The Study will involve a self-report questionnaire, assessing perceived partner depressive symptoms and experiences of partner guilt induction, and how this affects a willingness to tolerate intimate partner violence. Theoretically, if guilt induction is linked to greater accommodation, which is a commitment driven behaviour, it may potentially result in the accommodation of negative behaviours as serious as physical abuse. Research on partner aggression and intimate partner violence suggests that commitment is a key factor for why people tolerate intimate partner violence (Arriaga et al., 2018; Dare et al., 2013). Thus we expected that a partner on whom guilt has been induced would have more commitment-based motivations, which will increase tolerance for intimate partner violence. This leads to our third and final hypothesis addressed in Study 2, that people's guilt-inducing behaviours will predict their partner being relatively more tolerant of intimate partner violence (*Hypothesis 3*). This is the first study to investigate whether use of these behaviours will lead to partner accommodation of negative behaviours, and more specifically intimate partner violence. Our research aim is to provide a clearer picture of the consequences associated with guilt-inducing behaviours in intimate relationships and resulting psychological effects on a partner.

Alternative explanations

In Study 1, we included an additional measure of attachment style, and coded for anger to rule out possible alternative explanations for our results. Guilt induction has an established link to attachment anxiety (Overall et al., 2014) and thus our main reason for including it as a control was to ensure that this did not explain the relationship between depressive symptoms and guilt induction. Attachment anxiety and depressive symptoms have both been associated with relationship insecurities (Whiffen, 2005), thus we needed to be able to distinguish between the two, in order to identify a unique relationship between depressive symptoms and guilt induction.

We also wanted to rule out the possibility that expressions of anger, which have been linked with hurt and guilt induction, did not explain any patterns of guilt induction or partner accommodation. Emotions of hurt and guilt were often being linked to anger and hostility, and even occurring concurrently due to similar causes, which can be seen in research that links depression with hostility in relationships (Kernis et al., 1989; Lemay et al., 2012). As hostility is a function of anger, as opposed to hurt, this indicates that anger is an emotion that also needs to be considered when looking at relationship insecurity. Thus we intend to code for anger when looking at the relationships between depression, guilt induction and accommodation, in order to confidently distinguish between causes/outcomes of guilt induction as opposed to anger (Lemay Jr et al., 2012; Overall et al., 2014).

In Study 2 we included an additional measure of guilt susceptibility, due to the role that this has been found to play in guilt within interactions (Vangelisti at al., 1991). Vangelisti et al. (1991) found that individuals who were more susceptible to guilt, were more likely to be guilt induced in everyday interactions. This suggests that guilt susceptibility could play an important role in the mediation we will assess in Study 2 between perceived partner depressive symptoms, experiences of guilt induction and tolerance for intimate partner violence. This exploratory analysis will allow us to ascertain if, and how guilt susceptibility may influence our findings in relation to guilt induction and the subsequent partner outcomes.

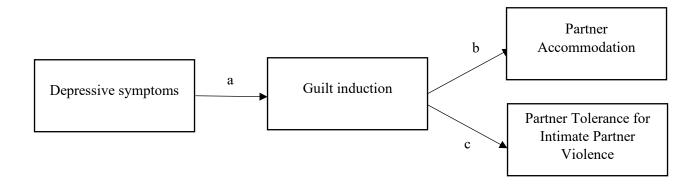


Figure 2. Our main model showing hypothesised links between depressive symptoms, guilt induction and associated outcomes of partner accommodation and partner tolerance for intimate partner violence.

STUDY 1

Method

Participants

One hundred and fifty-two couples responded to advertisements that were posted around a New Zealand university for a study looking at 'goal completion in romantic relationships'. Eligible participants were couples who had been together for at least one year. Participants were aged between 18 and 68 (M = 23.77, SD = 7.12). Couples were typically married/civil union/cohabiting (57.5%), or otherwise in relationships which were reported as "serious" (31.8%) or "steady/exclusive" (10.5%). Relationship length ranged from 6 months to 48 years (M = 40.16 months, SD = 53.52), with an average relationship duration of 3 years.

Procedure

In the initial stage of the study, participants completed questionnaires asking about demographic information and including individual-difference and relationship-related measures. Couples then sat opposite each other at a table and were instructed to engage in a warm-up discussion about their week to familiarise participants with the procedure. The focal interactions were two 6-minute tasks which were described as "communication games". Before commencement of the tasks, a trained research assistant explained the following instructions:

"The following interaction will be a communication-style game for you to complete together. The instructions and rules of the game are written down on the paper on each of

these clipboards. When I leave this room you can both flip the page over and begin reading the instructions, but do not discuss or begin the game until I give you the signal through the intercom."

In each task, only one participant was given instructions for the game and how to perform the task, while the other had the resources to complete the task (order was counterbalanced for gender and for the type of game). Both participants were informed that they had 100 points to begin with, and any mistakes in the task would cause them to lose points. One task involved the task completer having to construct structures using coloured blocks; the other task involved identifying specific geometric shapes out of many possibilities. Both tasks were pilot-tested to be equivalent in difficulty. After the communication games, participants then completed questionnaires and engaged in discussions about personal goals, unrelated to our research aims, before being debriefed. Participants each received \$40 in vouchers. This study received ethics approval from Victoria University of Wellington.

Questionnaire Measures

Depressive Symptoms. Depressive symptoms were measured using the reliable Center for Epidemiologic Studies – Depression scale (CES-D Scale; Carleton et al., 2013; Radloff, 1977). Twenty items indexed symptoms of depression based on experiences in the last week (e.g., "In the last week I felt depressed", "I did not feel like eating; my appetite was poor" and "I thought my life had been a failure"). Items were rated on a Likert scale from 0 (*rarely or none of the time*) to 3 (*most or almost all of the time*). Items were averaged together such that higher scores indicated higher depressive symptoms ($\alpha = .900$). The CES-D is designed for samples similar to the current, predominantly student sample rather than for assessing clinical-level depression or major depressive disorder (Roberts et al., 1989).

Attachment Orientation. Participants completed the adult attachment questionnaire (AAQ) that assessed attachment within romantic relationships (Simpson et al., 1996), which was utilised as a covariate in our additional analyses to rule out attachment insecurity as an alternative explanation. There were 17 items in total, nine items that assessed attachment anxiety and eight items that assessed attachment avoidance. Example questions from this measure include "I often worry that my romantic partners don't really love me;" and "I'm not very comfortable having to depend on romantic partners" to which participants are asked to rate on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The items were averaged together such that a higher score indicated greater attachment anxiety ($\alpha = .820$) or attachment avoidance ($\alpha = .814$).

Observational Measures

All coding was carried out by 1 primary coder, who was familiarised with the schedule outlining behaviours of guilt induction, accommodation, and emotion expression. In order to assess inter-rater reliability, two additional research assistants rated 10% of the recordings.

Ratings were made separately for each participant in the interaction and for each 30-second segment of the 6-minute task.

Guilt Induction. Guilt induction was operationalised as the interpersonal behaviour of exaggerating expressions of hurt or implying downfalls in commitment and caring in the partner, in order to elicit guilt and prompt that partner to be caring and kind. Observational coding of guilt induction was based on negative-indirect communication behaviours of supplication and manipulation (Overall et al., 2009). Coders rated the frequency, intensity, and duration of the following behaviours (1-2 = low, 3-5 = moderate, 6-7 = high) within each 30-second block. These behaviours included; how much an individual openly expresses emotional hurt and

exaggerates their emotions (e.g., sulking or head hanging), how much an individual appeals to a partner's love, concern, commitment, or relationship obligations (e,g., "This is too hard, I can't do it!") and the extent to which one portrays oneself as needing help and being less capable (e.g., "I just can't do this!"). Initial ratings by the primary coder and the additional research assistant ratings indicated good interrater reliability ($\alpha = .885$).

Accommodation. Accommodation was operationalised in this study as "soft positive" communication strategies created by Overall et al. (2009). This was coded as the extent to which a partner will respond positively following negative behaviour such as guilt induction. These strategies were seen when individuals attempted to have open and positive communication in the face of a potential challenge or conflict, such as responding constructively or positively to destructive and unpleasant behaviour. Coders assessed the extent to which participants expressed positive affect and friendliness (e.g., laughing, smiling), tried to get points across using a softer approach (e.g., "You can do this, maybe read over the instructions again"), pointing out the positive characteristics in one's partner, and being open to one's partners opinion or ideas (e.g., "I see what you are saying!"). Reliability analyses for accommodation coding indicated good interrater reliability ($\alpha = .834$).

Expressions of Anger. Our alternative analyses also included coding for expressions of anger, due to anger being previously linked with hurt and guilt induction (see Overall et al., 2013), in order to account for any potential affects within our model. Coders followed the externalising negative affect (Anger) component to the Specific Affect Coding System (SPAFF; Gottman et al., 1996). Coders assessed the frequency and severity of behaviours including the extent to which individuals openly expressed frustration to their partner (verbal or non-verbal), how much they express anger through I-statements (e.g., "I am angry"), as well as retaliatory

questions in response to one's partner (e.g., "But you said this!"), use of dominant commands, and subtle physical cues of anger. Reliability analyses indicated an acceptable level of interrater reliability for anger coding ($\alpha = .778$).

Results

Descriptive Statistics.

Descriptive statistics and correlations between the key variables are presented in Table 1. Participants reported reasonably low levels of depressive symptoms, as expected in our non-clinical sample. The average level of observed guilt induction behaviours used by couples within each 30-second block of time in a discussion was very low on average. Nonetheless, nearly all individuals (290 out of 304) displayed at least one instance of low-level guilt induction (e.g. sulking, looking overly confused), and 140 individuals displayed at least one instance of moderate-level guilt induction (e.g. overtly expressing distress, implying blame).

As expected, significant correlations emerged between depressive symptom and guilt induction, and guilt induction and partner accommodation (see Table 1). However, to properly test our hypothesis we conducted dyadic analyses that accounted for the inherent dependence of measurement within each romantic relationship. The following analyses were multi-level models using the MIXED procedure in SPSS version 24, following Kenny, Kashy, and Cook (2006).

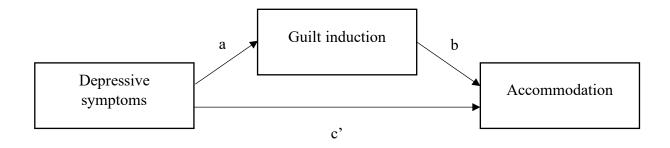


Figure 3. Mediation model, with indirect path (a x b) and direct path (c').

Note. All paths were moderated by gender.

Path A: Depressive symptoms as a predictor of guilt induction.

We conducted a dyadic model testing path A of the proposed model (Figure 3). We regressed people's observed displays of guilt induction during the task on their depressive symptoms, including gender and the gender × depressive symptoms interaction to account for potential gender differences. Results are displayed in Table 2. As hypothesised, individuals' higher level of depressive symptoms was associated with greater use of guilt-inducing strategies. There was also a significant gender effect in which women displayed relatively higher levels of guilt induction than men. We did not find evidence that gender moderated the link between depressive symptoms and guilt induction. Thus, evidence supported that people higher in depressive symptoms tended to use more guilt-inducing strategies when interacting with their partners.

Path B: Guilt induction as a mediator of the relationship between depressive symptoms and partner accommodation.

The next step was to test path B of our model (Figure 3), again by using dyadic analyses. This involved firstly regressing observed partner accommodation onto depressive symptoms, in order to establish the direct effect within the model. We again included gender and also gender \times depressive symptoms interaction. Results are displayed in Table 2. Higher levels of depressive symptoms predicted more observed accommodation from one's partner (see Table 2). We also found two gender effects here, firstly that women were generally more accommodating of their partner than men (B= .095, t= 8.445, p<. 001). Secondly, we found that there was a significant gender difference in how accommodating men and women were towards their partner when they

were displaying depressive symptoms (B= .118, t= 5.011, p<.001). In order to interpret what the specific gender effects were for men and women, we conducted a simple slopes analysis which revealed that men were not any more likely to be accommodating towards their partner when they were displaying depressive symptoms (B = .051, t = 1.186, p = .236), whereas women were significantly more accommodating if their partner is depressed (B = .141, t = 2.761, p = .006).

We then tested path B of our model. Partner accommodation was firstly regressed onto guilt induction, and then onto depressive symptoms × guilt induction as simultaneous predictors. Finally partner accommodation was regressed onto gender and the gender × guilt induction interaction to see any gender differences. As hypothesised, guilt induction predicted more partner accommodation (see Table 2). This supports our second hypothesis. Gender was not found to moderate the relationships between depressive symptoms and guilt induction (path A), or guilt induction and partner accommodation (path B) (Table 2).

We estimated the indirect effect for the mediation model in R Studio (R 3.6.3) using RMediation (Tofighi & MacKinnon, 2011). Significant indirect effects are indicated when the 95% confidence interval does not overlap 0. Results indicated that relationship between depressive symptoms and partner accommodation was mediated by guilt induction (B = .005, 95% CI [.001, .005]). This result is consistent with our expected process in which people higher in depressive symptoms use greater levels of guilt induction, which in turn predicts more accommodating behaviour from their intimate partners.

Exploratory Analysis

We also examined the temporal associations between guilt induction and partner accommodation. Accordingly, we conducted the same analyses described above for path B but

Table 1

Descriptive statistics and correlations among Study 1 variables

	Variable	1	2	3	4	5	6	7	8
1	Depressive symptoms	-							
2	Guilt induction	.04**	-						
3	Accommodation	.04**	.09**	-					
4	Anger	.01	.04**	05**	-				
5	Attachment anxiety	.38**	.01	.04**	.00	-			
6	Age	21**	08**	13**	02	04**	-		
7	Gender	06**	04**	12**	00	17**	07**	-	
8	Relationship length	13	05**	08**	017	05**	.73**	.01	-
\overline{M}		0.80	1.39	2.07	1.19	3.07	23.19	47	40.16
SD		0.51	0.86	1.04	0.59	1.11	6.35	0.99	53.57

Note. The depressive symptoms scale ranged from 0–3. All other scales had possible ranges of 1–7. **p < .01; * p < .05.

instead predicted partner accommodation in the *subsequent* 30-second block following guilt induction (and including partner accommodation in the same 30-second block as a covariate). Interestingly, the analyses showed a negative interaction between guilt induction and partner accommodation in the next 30 second time slot (B = -.037, t = -2.660, p = .008). This analysis reveals how in the immediate context of guilt induction, partner accommodation increases, but then quickly results in the opposite effect of decreased partner accommodation.

Analyses Testing Alternative Explanations

Our first set of analyses tested the possibility that participants' attachment anxiety explained the patterns found between depressive symptoms, guilt induction, and partner accommodation. Indeed, evidence has already linked depressive symptoms with attachment anxiety (Wei et al., 2004; Whiffen, 2005), including in the current sample (see Table 1), and attachment anxiety has been linked with greater guilt induction (Overall et al., 2014). Thus, an alternative explanation for a relationship between higher levels of depressive symptoms and use of guilt induction is that individuals higher in depression tend to also be higher in anxiety, and therefore use more guilt induction. However no significant relationship was found between attachment anxiety and guilt induction (B = -.013, t = -1.307, p = .191), and the association between depressive symptoms and guilt induction remained significant (B = 0.064, t = 2.898, p= .004). We also controlled for attachment anxiety at the second step of the model, and found no significant relationship between attachment anxiety and partner accommodation (B = -.013, t = -1.013, p = .311), and guilt induction still predicting more partner accommodation when controlling for attachment anxiety (B = .103, t = 6.522, p < .001). We additionally regressed guilt induction onto gender \times attachment anxiety, which showed a lack of gender effects (B = -.010, t = -.982, p < .326), as did the relationship between gender × attachment anxiety interaction and

Table 2. Path A and path B assessed in dyadic models predicting relationships between individual's depressive symptoms and guilt induction, and guilt induction and partner accommodation. Gender effects were also observed.

		Guil	t Induction		Accommodation					
	В	95% CI	95% CI	t	В	95% CI	95% CI	t		
Predictor		(lower)	(upper)			(lower)	(upper)			
Depressive symptoms	.052	.012	.091	2.569**	.120	.070	.170	4.693**		
Guilt induction					.102	.071	.133	6.474***		
Depressive symptoms x Guilt induction					.005	.001	.010			
Gender × Depressive symptoms	013	052	.026	637	.137	.089	.186	5.553**		
Gender × Guilt induction					.026	005	.057	1.643		

Note. The full mediation between depressive symptoms, guilt induction and accommodation was carried out in R (R 3.6.3) using RMediation (Tofighi & MacKinnon, 2011). ** p <.01), (* p <.05).

accommodation (B = .025, t = 1.937, p = .053). Overall, this indicates no evidence for the alternative explanation that depressive symptoms and guilt induction were due to the co-occurrence of attachment anxiety.

Our second set of analyses included participant's expressions of anger as covariates. In prior psychological literature, emotions of anger and guilt induction have been acknowledged as having some similar motivations and consequences (see Table 1; Overall et al., 2014). However, our expectation is that expressions of hurt and sulking are emotions specifically used in the process of guilt induction, and so the effects should not be explained by anger or frustration (also see Overall et al., 2013). When controlling for anger in the relationship between depressive symptoms and guilt induction, the link remained significant (B = .051, t = 2.569, p = .01). Interestingly there was a general effect of anger on guilt induction (B = .036, t = 2.016, p =.044), suggesting that those higher in expressions of anger are more likely to also guilt their partners. As we did with the first step of the model, we controlled for anger while assessing the link between guilt induction and partner accommodation. No major effects were found between anger and accommodation (B = -.021, t = -0.965, p = .335), meaning that even when controlling for anger guilt induction was still found to predict more partner accommodation, controlling for anger (B = .102, t = 6.496, p < .001). Unsurprisingly, we did not find a significant gender difference when we regressed the guilt induction onto the gender \times anger interaction (B = .002, t = .128, p = .898), or accommodation onto gender x anger (B = .004, t = .162, p = .871).

These results indicate distinct effects of anger and guilt induction, providing no support for the alternative explanation that effects were due to anger.

Discussion

Study 1 assessed the relationship between depressive symptoms, guilt induction and partner accommodation. We found that those individuals who were higher in depressive symptoms, were more likely to use guilt induction towards their partner, supporting *Hypothesis 1*. This findings was consistent with our expectation that individual's higher depressive symptoms have a heightened need for partner reassurance, and so they attempt to elicit these signals of care in their partners by expressing higher levels of hurt. Supporting *Hypothesis 2*, individuals' use of guilt induction was associated with greater accommodation from their partners. This was consistent with our expectation that guilt induction elicits more caring and reassuring behaviours from partners, and extends to general increased accommodation of negative behaviours. Furthermore, the mediation analyses supported that higher depressive symptoms is associated with more guilt induction, which in turn is associated with increased partner accommodation. Finally, additional analyses indicated no evidence that expressions of anger or participants' attachment anxiety were responsible for the findings.

One unexpected finding emerged. When examining partner accommodation in the 30 seconds following participants' guilt inducing behaviors, findings indicated that greater use of guilt induction was related to *lower* subsequent levels of partner accommodation. Thus, guilt induction predicted a decrease in partner accommodation in the longer term. This pattern indicates that guilt induction may not have positive outcomes for either partners in the long-term. This is likely due to two factors. Firstly the absence of an immediate relationship threat, and secondly the negative partner outcomes associated with guilt induction such as lowered relationship satisfaction and emotional suppression which would likely lead to reduction in motivation to accommodation (Impett et al., 2012; Rusbult et al., 1991).

Study 1 provided evidence utilising partners' actual interactions with one another to support the prediction that people higher in depressive symptoms tend to be higher in guilt induction, and in turn, their partners are relatively higher in accommodation (at least within that moment in time). However, Study 1 could not test whether guilt induction was linked with a tolerance for negative behaviours extending to more serious allowances for destructive behaviour in relationships. Accordingly, in Study 2 we explored the possibility that recalled partner experiences of guilt induction are linked with people being more tolerant of experiencing intimate partner violence. As opposed to this first study, our second study is an individual self-report design, assessing individual's experiences of partner guilt induction rather than observing it in a dyadic study.

STUDY 2

Method

Participants

Participants were two hundred and seventeen first-year students (155 female, 57 male, 1 non-binary who was excluded from the study) from a New Zealand university who completed an online study in return for course credit. Study 2 was part of a broader study looking at perceptions and experiences of aggression in heterosexual intimate relationships. Data collection took place from the 7th May 2020 until June the 3rd 2020. At this time New Zealand was in one week of 'Level 3' lockdown, before moving to 'Level two' on 14th May due to a global pandemic (World Health Organization, 2020). During these two alert level periods, people had returned to online classrooms and were able to slightly extend their bubble if necessary and engage in low risk recreation activities (Unite against COVID-19, 2020). The New Zealand government further outlined that at level 2, people were allowed to socialise again in groups of

up to 100, and health and recreation services were able to resume (Unite against COVID-19, 2020). All participants were currently in a relationship, or had previously been in a romantic relationship that lasted at least one month, with participants generally reporting being currently single (50.5%), otherwise cohabiting/married (6.5%), or in a "stable" or "dating" relationship lasting a month or longer (29.1%). A small amount chose not to say (13.6%). Participant ages ranged from 17 and 55 (M = 19.08, SD = 3.195).

Procedure

Participants completed the survey online via Qualtrics. Participants were given study information and provided their consent on the first page. The survey asked for demographic information as well as for individual-differences and violent relationship behaviors that were not germane to the aims of this study. The final section relevant to our study included tolerance of intimate partner violence, perceptions of their partner's depressive symptoms, experiences of their partner's guilt induction and their own susceptibility to guilt induction. Finally, participants were then thanked for their participation and debriefed on the study. Ethics approval was received from Victoria University of Wellington.

Measures

Perceived Partner Depressive Symptoms. Perceived partner depressive symptoms were measured with an adapted version of the short-form scale of the Center for Epidemiologic Studies – Depression scale (CES-D Scale) (Carleton et al., 2013; Radloff, 1977). Participants rated 9 items that are associated with symptoms of depression referring to their perceptions of their *partner's* thoughts, feelings, and behaviours (e.g. "My partner felt sad"; Items were rated on a Likert scale from 0 (*rarely or none of the time*) to 3 (*most or almost all of the time*). This was

an indirect measure of the partner's experienced depressive symptoms due to the availability of the sample. However, research indicates that individuals in intimate relationships have relatively good awareness of their partners emotional state and thought processes (Thomas & Fletcher, 2003), which indicates that this measure was an indirect but plausible indicator of the partner's depressive symptoms. Items were averaged so that higher scores indicated higher perceptions of partner's depressive symptoms ($\alpha = .743$).

Experiences of Partner Guilt Induction. Experiences of partner guilt induction were measured with 7 items developed for this study by adapting measures from Overall et al.'s (2014) coding schedule of guilt induction and from Vangelisti et al.'s (1991) self-report measure of inducing guilt in interpersonal interactions. Example items are "My partner tends to emphasise how hurt they feel", "My partner makes a big deal of problems to make me reassure them", and "Guilt is a very effective way to get me to do something" (1 = Strongly Disagree to 7 = Strongly Agree). Items were averaged so that higher scores indicated greater experiences of partner guilt induction ($\alpha = .687$). We additionally assessed the component structure of this scale alongside guilt susceptibility (described below).

Guilt Susceptibility. We included a measure of susceptibility to guilt, in order to establish any possible effects that this could have on the proposed model. As individuals higher in guilt susceptibly tend to be more vulnerable to guilt induction, this could affect the strength of the relationship between experiences of guilt induction and tolerance of intimate partner violence (Vangelisti et al., 1991). Guilt susceptibility was measured with 3 items that were adapted and developed from Vangelisti et al.'s (1991) self-report measure of guilt susceptibility within interactions, which often referred to the self. An example item is "A good way to get something from me is to make me feel guilty". Items were averaged so that higher scores indicated higher

susceptibility to guilt ($\alpha = .665$). We also assessed the component structure of this scale alongside perceived partner guilt induction.

Principal Components Analysis of Perceived Guilt Induction and Guilt

Susceptibility. We examined the reliability of the scales for experiences of partner guilt induction and guilt susceptibility with reliability analyses conducted in SPSS version 24 (Kenny et al., 2006). We first conducted a principal components analysis, with an Oblimin rotation. An oblique rotation seemed most appropriate due to the likelihood of guilt induction and guilt susceptibility being at least somewhat correlated, which this rotation allows for (Allen, 2017). This analysis extracted three components, with eigenvalues above 1. The susceptibility items clearly all loaded on the same factor (i.e., loadings above .696, no cross-loadings above .301), which provided support for the consistency of the scale. The guilt induction items were distributed across two factors that represent the two items with a negative valence (e.g. "My partner seldom makes me feel guilty when they aren't getting their way") and five items with a positive valance (e.g. "My partner will often emphasise how much my actions negatively impact

them"). A reliability analysis to establish whether the Cronbach's alpha could be improved by

overall reliability when the items were removed. Thus the items were kept in due to established

aspects to a behaviour that would not be measured using only positive-valence items (Ray et al.,

removing the two negative-valence items indicated that there was no significant change in

benefits such as obtaining a more diverse measure of a construct, and capturing additional

2016; Tomás et al., 2013).

Tolerance of intimate partner violence. We measured tolerance of intimate partner violence with a vignette design that described different scenarios between "John" and "Carol" in which one person was aggressive toward the other under different scenarios (Dixon, *in*

preparation). This study examined participants' evaluations of four different scenarios that involved two types of violence (moderate violence = "he slapped her" or severe violence = "she punched him"), in response to two different scenarios (partner infidelity = "she was having an affair" or partner aggression = "he yelled/threatened her with violence". For example, the following scenario describes moderate violence in response to infidelity:

"John discovered that Carol was having an affair with another man. Then, one evening when Carol was sat on the sofa watching television John confronted her about her infidelity and slapped her across the face."

Participants' tolerance of the character's violence was assessed with a single item completed after each scenario, which was "To what extent do you approve of Carol's/John's actions?" (1 = $not \ at \ all \ to \ 4 = definitely \ or \ 5 = I'd \ rather \ not \ say$). Participants' responded to each of the four scenarios twice, with the gender roles reversed. Responses to each pair of scenarios was averaged together (r's = .308** to .695**) to identify four possible domains in which participants could tolerate violence.

Results

Descriptive Statistics

Descriptive statistics and correlations between our key variables, including the four separate scenarios of tolerance of intimate partner violence are presented in Table 3. Participants typically reported low levels of perceived partner depressive symptoms, which is consistent with the sample in Study 1 which was also predominantly made up of students from Victoria University of Wellington. The average level of experiences of partner guilt induction was moderate, and self-reported guilt susceptibility was moderate to high. Tolerance for intimate partner violence was relatively low for all four scenarios we presented. However the tolerance

Table 3.

Descriptive statistics and correlations

-	Variable	1	2	3	4	5	6	7	8
1	Depressive symptoms	-							
2	Guilt induction	.33**	-						
3	Moderate violence in response to infidelity	.12	.04	-					
4	Severe violence in response to infidelity	.24**	.06	.54**	-				
5	Moderate violence in response to partner aggression	.15*	.19**	.67**	.52**	-			
6	Severe violence in response to partner aggression	.17*	.003	.65**	.80**	.70**	-		
7	Susceptibility	.19*	.24**	05	08	.02	10	-	
8	Gender	20**	07	10	13	10	21**	.08	-
\overline{M}		.72	3.10	.65	.19	.43	.34	3.86	.73
SD		.50	1.01	1.01	.56	.76	.55	.62	.45

Note. The partner depressive symptoms scale ranged from 0–3. The scale measuring tolerance for intimate partner violence ranged from 1-4, and the scale for partner guilt induction and susceptibility ranged from 1–7. *p < .05; **p < .01

was slightly higher in the two scenarios in which the level of violence was moderate as opposed to severe, especially when the moderate violence was in response to infidelity. As predicted, a significant positive correlation emerged between perceived partner depressive symptoms and experiences of partner guilt induction, as well as between perceived partner depressive symptoms and susceptibility to guilt. We found one significant relationship between intimate partner violence tolerance and experiences of partner guilt induction. This being that more experiences of partner guilt induction was associated with relatively more tolerance of moderate violence in response to partner aggression. However, to test our hypotheses we needed to conduct regression analyses and mediation analyses using the PROCESS (version 3.5; Hayes, 2017) modelling procedure in SPSS.

Path A: Depressive symptoms as a predictor of guilt induction.

We analysed path A of the proposed model between depressive symptoms and guilt induction (Figure 2), by regressing peoples' experiences of partner guilt induction onto their perceptions of their partner's depressive symptoms (Figure 4). We also regressed experiences of partner guilt induction onto gender (coded *women* = 1 and men = 0), and the gender × depressive symptoms interaction, which accounted for any possible gender differences. As hypothesised, results showed that higher levels of perceived partner depressive symptoms were significantly associated with more experiences of partner guilt induction (B = .604, t = 2.373, p = .019). We found no evidence for any gender effects on experiences of guilt induction. Also gender did not moderate the relationship between perceived partner depressive symptoms and experiences of partner guilt induction (B = .080, t = .260, p = .795. This analysis suggests that people who perceived their partner to be higher in depressive symptoms also tended to experience greater

guilt induction from those partners, thus conceptually replicating the findings of Study 1, and providing further support for Hypothesis 1.

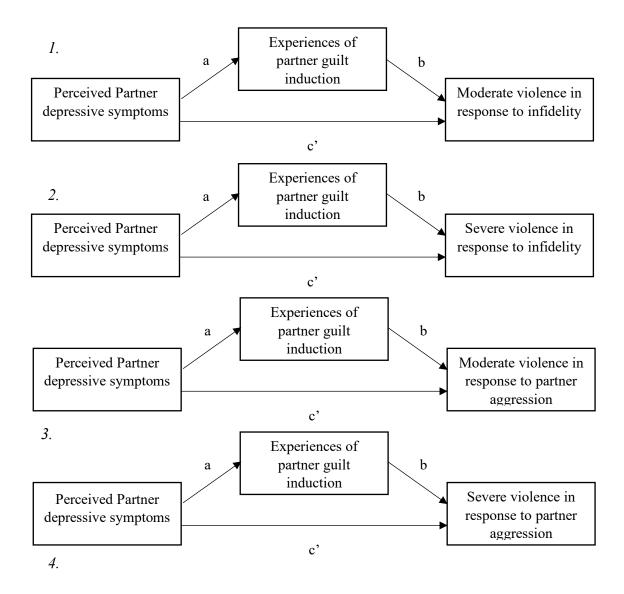


Figure 4. Various mediation models that we are assessing in Study 2. Each has a variation of two types of partner behaviour (partner aggression or infidelity) and intimate partner violence (moderate or severe violence)

Paths B and C: Guilt induction as a mediator of the relationship between depressive symptoms and tolerance of intimate partner violence.

The next step of our analysis tested Path B's and C's of the proposed mediation model (Figure 4). We analysed the relationship between perceived partner guilt induction and the four scenarios of tolerance for intimate partner violence separately in SPSS, and we will present the results from the non-significant results to the significant. Conducting separate analyses in this way raises the probability of identifying false positives, thus we treated the outcomes as exploratory evidence. We first report the non-significant results when predicting tolerance for moderate violence in response to infidelity, and tolerance of severe violence in response to infidelity and partner aggression. We found no evidence that perceived partner depressive symptoms predicted greater tolerance for any of these forms of violence (see Table 4). We also found no evidence that experiences of partner guilt induction predicted greater tolerance for any of these forms of violence (see Table 4). There were no significant associations between gender and guilt induction. Furthermore we found no evidence that gender moderated the relationship between perceived partner depressive symptoms and tolerance of violence, or between guilt induction and tolerance of violence in any of these three scenarios. These three analyses did not support Hypothesis 3.

A significant relationship emerged in the regression of tolerance of moderate violence in response to partner aggression, onto experiences of guilt induction (see left column of Table 4), suggesting that participants who had partners higher in guilt induction, were more tolerant of this type of tolerance of intimate partner violence, which supported our hypothesis. Due to path B being significant in this particular version of our model, we then ran the full mediation model in PROCESS. The estimate for the indirect effect was considered significant because the

Table 4. Path B and Path C for the mediation models tested in Study 2, predicting the relationship between depressive symptoms, guilt induction and tolerance of 4 types of intimate partner violence, allowing for gender moderation (i.e., differences between men and women).

		olerance iolence			Tolerance of moderate violence - aggression			Tolerance of severe violence - infidelity				Tolerance of severe violence - aggression				
-	В	95	% CI	t	В	95	5% CI	t	В	95%	6 CI	t	В		95% C	CI t
	Low High		Low		High		Low High		şh		Low H		ligh			
Depressive	.283	.104	.463	3.116**	.225	.033	.417	2.318*	.230	084	.545	1.446	.114	579	.139	-1.209
symptoms																
Guilt induction	001	.090	.087	-0.031	023	116	.071	480	.023	132	.177	.288	.178	.064	.292	3.080**
Gender × Depressive symptoms	251	.224	.485	0.727	343	724	.039	-1.773	143	788	.502	436	536	-1.021	051	-2.181*
Gender × Guilt induction	.012	152	.176	0.147	.146	127	.219	.526	.235	061	.531	1.565	047	274	.179	411

^{**}*p* < .01; * *p* < .05.

95% confidence interval was not overlapping 0 (B = .120, 95% CI [.024, .254]. This result supported our hypothesis that the relationship between partner depressive symptoms and tolerance for one scenario of violence was statistically mediated by partner guilt induction.

An unexpected gender moderation also emerged in the direct association between perceptions of partner's depressive symptoms and tolerance of moderate violence in response to partner aggression. In order to interpret the specific gender effects for men and women, we conducted a simple slopes analysis, which revealed that men who perceived their partner to be higher in depressive symptoms, were significantly more likely to be tolerant of intimate partner violence (B = .578, t = 2.697, p = .010). While women were not more tolerant of moderate violence regardless of perceptions of their partner's depressive symptoms (B = .042, t = .304, p = .762)

Additional Analyses

In addition to testing these main pathways, we also included an analysis controlling for susceptibility to guilt, along both path A's and B's (Figure 4) to explore whether guilt susceptibility made our predicted mediations stronger. We included this exploratory analysis due to prior research by Vangelisti et al. (1991) who found that people higher in susceptibility to guilt were more affected by guilt induction, subsequently feeling more guilt in interactions. As our study assessed partner outcomes of guilt induction, the inclusion of a guilt susceptibility measure was important. If consistent with Vangelisti et al. (1991), some partners could be more affected by experiences of partner guilt induction and feel guiltier, thus the strength of associated outcomes may differ across individual's levels of guilt susceptibility. We controlled for this potential effect by including participants' guilt susceptibility as a moderator in PROCESS (i.e., a moderated mediation model; PROCESS model 14). We found that guilt susceptibility did not

moderate the relationship between depressive symptoms and guilt induction (B = -.240, t = -.1.054, p = .293), or any of the relationships between guilt induction and the various forms of intimate partner violence tolerance (Bs = .008 to .061, ts = .-.086 to .895, ps = .372 to .931). We carried out this exploratory analysis due to prior literature linking guilt susceptibility with greater felt effects of guilt induction (Vangelisti et al., 1991). However, guilt susceptibility was not found to moderate either of the relationships within the model thus not significantly altering the strength of the one significant mediation. This indicates that more experiences of partner guilt induction, predicted greater tolerance of moderate reciprocal violence, regardless of personal susceptibility to guilt.

Discussion

Study 2 examined the statistical relationships between perceived partner depressive symptoms and experiences of partner guilt induction, and these experiences of partner guilt induction with tolerance of intimate partner violence (see Figure 4). Our findings conceptually replicated the results from Study 1 assessing path A, whereby individuals who perceived their partner's to be higher in depressive symptoms, experienced more partner guilt induction, lending further support to Hypothesis 1. The results for the expected indirect effect in which perceived partner depressive symptoms predicted greater experiences of guilt induction, which then predicted increased tolerance for moderate violence in response to partner aggression, showed only limited support for our Hypothesis 3. However, despite the limited nature of this finding, it does suggest that accommodating negative behaviours such as guilt induction (*Hypothesis 2*) may be extending to toleration of moderate partner violence. The relationship between partner guilt induction and tolerance of intimate partner violence was non-significant when looking at severe violence in response to either partner aggression or infidelity, and moderate violence in

response to infidelity. However, guilt induction was found to predict higher tolerance of moderate violence in response to partner aggression, which supports Hypothesis 3. This suggests that experiences of guilt induction can be potentially linked with greater tolerance for intimate partner violence, however it appears to be dependent on the level of violence, and situation in which it is being used. Additional analyses examined whether guilt susceptibility was related to differences in the relationships between an individual's perception of partner depressive symptoms and experiences of partner guilt induction, or the subsequent level of tolerance for intimate partner violence. We did not find any significant results in these exploratory analyses, which indicated that the extent to which an individual was susceptible to guilt in interactions, did not influence the strength of our mediation. This indicated that the strength of our 1 significant mediation was not affected by susceptibility to guilt, which suggests that this mediation occurs in people both higher and lower in guilt susceptibility.

General Discussion

Two studies investigated whether depressive symptoms was linked with greater use of guilt induction on intimate partners, and whether in turn, there was a greater acceptance from their partners of more negative relationship behaviours. Study 1 supported Hypothesis 1: Individuals who experienced more depressive symptoms used greater guilt induction when interacting with their partners on a communication task, indexed by their behaviours that were observed using a novel coding scheme designed for guilt induction. Study 2 provided corroborating evidence by indicating, via self-report questionnaires, that people who perceived their partner to be higher in depressive symptoms experienced more guilt induction in their relationship. Evidence indicated that people higher in depressive symptoms engaged more in behaviours such as exaggerating expressions of hurt or confusion, in an attempt to elicit feelings

of guilt and be reassured or comforted. Results also supported that a greater use of guilt induction was linked with greater partner accommodation in the moment that guilt induction is used, including expressing reassurance and positive affect (Study 1; *Hypothesis 2*). Lastly, experiences of guilt induction were associated with a higher tolerance of moderate (but not severe) violence exclusively in response to partner aggression (Study 2; *Hypothesis 3*). As partner aggression can be categorised as a form of intimate partner violence, this indicates that guilt induction was more likely to predict tolerance of moderate, reciprocal violence.

Both studies found significant indirect effects indicating links between depressive symptoms and both partner accommodation and tolerance of moderate reciprocal violence, mediated by guilt induction. This pattern was consistent with our expectation that partners of people higher in depressive symptoms would be made to feel more guilt, therefore providing more reassurance and subsequently become more accommodating of negative behaviours. Another key finding was that the increased partner accommodation in the immediate context of guilt induction is not sustained over time. This suggests that the intended positive outcome of more partner accommodation and positivity, that is associated with guilt induction may be short lived. Our results are consistent with two theoretical perspectives. Firstly, that guilt induction has underlying motivations of wanting reassurance from a partner that align with the symptoms of depression. Secondly, people's use of guilt induction has both positive and negative consequences for one's partner and the relationship. Guilt induction elicits greater accommodation but also potentially fosters tolerance of patterns of reciprocal intimate partner violence.

Additional analyses addressed possible gender effects within our model. We also accounted for attachment anxiety when looking at underlying motivations of guilt induction, and

guilt susceptibility when exploring associated outcomes of the behaviour. Gender analyses revealed no gender differences within our overall model, although there were some minor gender effects, such as women being more likely to guilt induce in general. This was in line with prior literature which identified guilt induction as a strategy adopted more often by women and mothers (Donatelli et al., 2007; Overall, 2014). However, there was no evidence that gender moderated any of the pathways within our main model (see Figure 2). We therefore retained the assumption that our model applies to both men and women equally.

Extra analyses in Study 1 ruled out the possibility of attachment anxiety accounting for the effects we saw between depressive symptoms and guilt induction, and also revealed that attachment anxiety did not predict more guilt induction generally. Given the commonalities between symptoms of attachment anxiety and depressive symptoms (Whiffen, 2005), this finding substantiates our conclusion that the specific motivations attributable to depressive symptoms are associated with people's use of guilt induction. It is likely that we did not observe a specific effect of attachment anxiety on guilt induction in our study because our task did not involve relationship threats, and therefore did not function to activate the attachment system. Overall et al. (2014) identified a link between attachment anxiety and guilt induction behaviours by observing people's discussions of ongoing relationship problems. However, our results indicate that people higher in depressive symptoms feel generally insecure, leading them to use more guilt induction in everyday situations. This differs in the way those with attachment anxiety are typically motivated to guilt induce in the face of a relationship threat.

Finally, extra analyses in Study 2 examined individual differences in guilt susceptibility. Surprisingly, there was no evidence that guilt susceptibility moderated any of the pathways in our model, which ruled out the possible effect which personal susceptibility to guilt could have

on how much a partner might be guilt induced and subsequently impacted. Thus guilt susceptibility did not influence the strength of our one significant mediation between perceived partner depressive symptoms and higher tolerance for moderate reciprocal violence, which was mediated by experiences of partner guilt induction. Our findings were validated by this lack of significant guilt susceptibility effects. It indicates that an individual does not have to be particularly susceptible to partner guilt induction, to be effected by consequences such as increased tolerance of moderate, reciprocal intimate partner violence.

The Links between Depressive Symptoms, Guilt induction, and Accommodation

The positive links between depressive symptoms and guilt induction are consistent with current theory on the interpersonal feelings and motivations that characterise depressive symptoms. Specifically, individuals high in depressive symptoms feel worthless and inadequate in their interpersonal relationships, experience pervasive negative affect such as guilt and disappointment, and ruminate on their own and others' past transgressions (Donatelli et al., 2007; Downey & Coyne, 1990). Feelings of worthlessness and inadequacy associated with depression leave people in need of greater love and reassurance from their partner (Joiner & Coyne, 1999). Guilt induction is a behavioural strategy that may ease some of these associated feelings of worthlessness and insecurity as it tends to elicit pro-relationship behaviour (Baumeister et al., 1994; Overall et al., 2014). To illustrate, a person high in depressive symptoms may sulk, and say "I just can't be alone right now" which evokes a caring response of reassurance "I won't leave you, I love you" from a partner. Thus, for people high in depressive symptoms, guilt induction is one way to get the caring, reassuring response they desire, even if this may not be a long-term solution.

Our research was the first to identify a link between adults' depressive symptoms and guilt induction in intimate relationships. However, this finding was consistent with prior

research illustrating that parents higher in depressive symptoms used more guilt induction on their children (Rakow et al., 2009; Rakow et al. 2011). This pattern was theorised to come from a negative cycle of hurt feelings and rumination in parents higher in depressive symptoms, resulting in chronic guilt induction (Rakow et al., 2009). This could explain the behaviours that we saw in our own study, with individuals higher in depressive symptoms often expressing their hurt feelings and repeatedly bringing up aspects of the task that their partner did wrong (signalling rumination tendencies). However, there are also theoretical differences in that parental guilt induction sometimes took the form of more direct criticism and disparagement. This is because parents higher in depressive symptoms often struggle with normal behaviours of showing affection, and instead show concern by becoming overly critical (Rakow et al, 2009). While individuals higher in depressive symptoms can struggle to show affection within intimate relationships, guilt induction within intimate relationships tends to be more of an indirect strategy, and we observed few direct criticisms in our own study.

The patterns in our study are most clearly explained by the interpersonal perspective on depressive symptoms which encompasses concepts of severe relationship insecurity and excessive reassurance seeking (see Joiner & Coyne, 1999; Whiffen, 2005). Excessive reassurance seeking is a behaviour commonly associated with depressive individuals, that involves directly seeking out reassurances of love and commitment from a partner, even if these reassurances have already been given. This can often ultimately lead to partner exhaustion and withdrawal (Joiner et al., 1999; Joiner & Coyne, 1999). Relationship insecurities can develop in people higher in depressive symptoms due to a heightened sensitivity to rejection (Ayduk et al., 2001; Overall & Hammond, 2013). For example, Overall and Hammond (2013) found that individuals higher in depressive symptoms were more accurate at tracking how their partner

feels about them, but only when the changes were negative. This indicates that they are more receptive to possible interpersonal threats, such as reductions in partner commitment. As individuals higher in depressive symptoms also tend to amplify threats and ultimately fear rejection, this can result in relationship insecurity. A fear of reduction in partner commitment is likely a motivation behind why individuals higher in depressive symptoms and relationship insecurity use guilt induction.

An interpersonal insecurity perspective on depressive symptoms is also consistent with the positive relationship found between guilt induction and partner accommodation. By inducing guilt in an intimate partner, an accommodative response is elicited that reflects commitment and provides depressive individuals with the intended reassurances of affection. Accommodation is generally activated in response to destructive relationship behaviours, to stabilise the relationship and minimise any conflict. This is often done through positive affect and humour, as positiveindirect or "loyalty" communication behaviours (Overall et al., 2009; Rusbult et al., 1982). In our study, when people used more guilt induction, such as blaming partners for not doing well enough in the task, those partners tended to accommodate by smiling, laughing, and providing reassurances in regard to the task. These results suggest that partners' guilt induction was perceived as a destructive relationship behaviour, which generated an accommodative response to the immediate threat which aimed to provide reassurance and minimise conflict. Reoccurring instances of individuals ignoring negativity or indirect blame placement, for the sake of reducing hurt feelings in a partner, strongly reflects patterns of accommodation in response to a perceived 'destructive' or threatening relationship behaviour. This suggests people higher in depressive symptoms are more likely to use potentially destructive strategies just to get reassurance, which is consistent with theory on excessive reassurance seeking (Joiner et al., 1999).

This established relationship is also in line with a commitment based explanation. Guilt induction is a behaviour used to appeal to the commitment of one's partner, and get reassurances of that commitment through acts of care (Baumeister et al., 1994; Overall et al., 2014). Thus it is likely that partners in this study are experiencing greater levels of commitment in the immediate aftermath of guilt induction (Baumeister et al., 1994; Overall et al., 2014). This explains a sudden increase in accommodation, as level of commitment felt towards a relationship encourages the use of relationship maintenance behaviours such as accommodation (Rusbult et al., 1991).

Does Accommodating Negativity Extend to Tolerating Violence?

One aim of our research was to extend the literature on guilt induction by testing whether partners' positive responses to negativity (accommodation) could also extend to tolerating violence. We did not find a high (or generalisable) pattern of tolerance of violence in the sample. Three of the four categories of tolerance for aggression were not linked with experiences of guilt induction. Indeed, the more severe forms of violence (punching a partner) were generally not tolerated in our student sample, as it is a behaviour that people rarely justify (Lelaurain et al., 2018). However, we found limited evidence in support of our hypothesis in the case of moderate reciprocal violence. The scenario itself involved use of moderate violence (e.g., slapping) in response to verbal abuse and threats of violence, thus presenting itself as more retaliatory or even 'defensive' behaviour, which people tend to rate as a more justifiable form of violence (Basile & Hall, 2011; Harris & Cook, 1994; Yick & Agbayani-Siewert, 1997). Thus, perhaps guilt induction enhances tolerance of violence exclusively for these more malleable forms of violence.

Whilst accommodation can be an adaptive and at times necessary relationship behaviour, an increased tolerance for intimate partner violence is a potentially damaging outcome linked

with guilt induction. Current theory suggests that commitment explains this link, with commitment-driven beliefs and motivations associated with greater tolerance for intimate partner violence, both verbal and physical (Arriaga et al., 2018; Dare et al, 2013). Arriaga et al. (2018) recognised commitment based motivations, such as an extended history together, leading to the downplaying of aggression by treating it as a joke, or justifying it as due to "stress". Intimate partner violence research also acknowledges that individuals may not base their commitment on current feelings of satisfaction in a relationship (Arriaga et al., 2018; Rusbult & Martz, 1995). This suggests that when guilt induction elicits feelings of renewed partner commitment, the felt commitment may not well be based on current experiences within a relationship as guilt induction is actually a negative behaviour. Rather than basing commitment on current feelings, it is likely these individuals are relying on past positive experiences, which sustains a level of commitment that allows for tolerance of negative partner behaviours. Chronically guilt-induced individuals who are generally more accepting of moderate reciprocal violence, could likely have engaged in these commitment based, and potentially nostalgic processes in support of a commitment-based theoretical perspective.

An alternative explanation for the link between experiences of partner guilt induction and tolerance of intimate partner violence is self-blame, which is a common outcome associated with feelings of chronic guilt (Baldwin et al., 2006). It follows that partners who are constantly guilt induced may start to self-blame, for all of their partner's negative feelings, regardless of whether it is their fault. As self-blame and a need to make up for perceived transgressions heightens tolerance of intimate partner violence, this this could explain the relationship between experiences of partner guilt induction and increased tolerance for moderate reciprocal violence (Baldwin et al., 2006). However, self-blaming for instances of domestic abuse have been found

to occur even in cases of severe, repeated violence (Andrews & Brewin, 1990). This suggests an inconsistency with our own results as we did not find any significant effects regarding tolerance of severe forms of intimate partner violence. Then again other research observed patterns of self-blame shifting to partner blame, as the severity of violence increased (Frieze, 1979, as cited in Cascardi et al., 1992), which *would* be consistent with our findings. Thus research in this area is mixed. However, due to self-blame primarily occurring in chronically abusive relationships (Cascardi et al., 1992), and our study being a sub-clinical student sample, a commitment based explanation seems most likely. In addition to being more consistent with the nature of our sample, our first study indicated that guilt induction was related to more accommodation of negative behaviours from a partner, which is a behaviour driven by commitment based motivation. Thus it seems likely that more experiences of partner guilt induction, would again trigger a sudden increase in commitment based motivations, resulting in increased tolerance for some forms of intimate partner violence.

Negative Effects of Guilt induction for the Guilt Inducer

Another interesting finding from this study was the 'flip' from increased partner accommodation immediately following guilt induction, to decreased partner accommodation in the following time-span. This presents an unintended negative consequence for the person who has engaged in guilt induction. Whilst guilt induction encourages positive partner behaviour such as laughing and providing reassurances about the task, it appears to result in less of this behaviour at the next time span. This finding is consistent with Overall et al. (2014) who identified potential costs of partner accommodation such as emotional suppression and a lack of authenticity within a relationship, which can lead to reduced intimacy, undermined commitment and satisfaction. The most likely explanation for this change in accommodation across examined

passed, the motivation to behaviour in a relationship-stabilising way desists and the partner experiences the aforementioned personal costs of being made to feel guilty. This leads to a reduction in felt commitment and satisfaction within the relationship, and the accommodation of general negative behaviour decreases (Impett et al., 2012, Overall et al., 2014). Another explanation could be identified from the pattern of the conceptually similar behaviour of excessive reassurance seeking used by depressive individuals, which often results in a reduction in care and affection expressed due to the relentless nature of the reassurance seeking (Joiner & Coyne, 1991). Partners eventually become exhausted and withdraw from constantly reassuring (e.g., ignoring bids for love and attention), a process could likely have happened with accommodation in response to guilt induction. This indicates that while there are notable personal costs for an intimate partner being guilt induced, there are also costs for the guilt inducer.

Theoretical Implications

Our study has effectively expanded on the theory of excessive reassurance seeking commonly recognised in depressed individuals (Joiner & Coyne, 1999). Our results support the idea that those higher in depression crave assurances of love and use strategies to obtain reassurance with *indirect* behaviours such as guilt induction. This expansion to the kinds of influence strategies employed by individuals higher in depressive symptoms is unsurprising, as guilt induction provides a way to get affirmation from one's partner without directly seeking it out. Prior literature on depression has indicated that this is an option which individuals higher in depressive symptoms and relationship insecurity may feel more comfortable using (Buchwald & Rudick-Davis, 1993). Evidentally it is not only direct bids for love and attention that researchers

should be examining in relation to depressive symptoms, but also indirect behaviours that seek to consolidate commitment. Our research also indicates that guilt induction—like excessive reassurance seeking—can have maladaptive consequences for the guilt induced partner, and ultimately the relationship. Prior research on excessive reassurance seeking has been linked to poorer partner relationship satisfaction and even partner depression (Katz et al., 1999; Shaver et al., 2005). This is consistent with our own results that indicate long-term consequences of reduced positive behaviours (accommodation) and potentially even an increased partner tolerance for moderate forms of intimate partner violence.

Indeed, our additional analyses on the relationship between guilt induction and partner accommodation were unexpected because they revealed a potential "backfire" of guilt induction. Whilst being linked with more partner accommodation in the same 30-second time-frame, guilt induction predicted a relative decrease in the partner's accommodation in the subsequent 30-second timespan. This finding was consistent with prior guilt induction research in the context of attachment anxiety that showed declines in guilt induced partners' relationship satisfaction as a long-term effect of guilt induction (Overall et al. 2014). This implies the importance of feelings of relationship satisfaction to an individual's willingness and motivation to accommodate. Thus, guilt induction, whilst potentially having the desired effect in an immediate context, is ultimately detrimental as it eventually reinforces the feelings of relationship insecurity that led depressive individuals to seek out reassurance in the first place. Our results provide support for theory on how individuals higher in depressive symptoms appear to engage in strategies which ultimately lead to breakdown in communication and diminished relationship satisfaction (Coyne, 1976; Shaver et al., 2005).

Findings from our observational study are consistent with theory on depression and overlearned emotion scripts (Abelson, 1981). Emotion script suggests that accommodation of these chronic guilt inductions may only have occurred due to a learned pattern of emotion and behaviour. This would expand on current theory of guilt induction. Emotion scripts can exist as lay theories for everyone to follow, a certain emotion (could be anger or guilt) will have its own script around what could have caused it, and what emotional responses and behaviours will follow (Fitness, 1996). It has been recognised that in intimate relationships, couples will create their own local emotion scripts about how emotions work and what interactions should follow. For example, a specific joint emotion script for a couple might be such that when a partner is sad, the other partner will feel sympathetic and provide comfort and advice. However, such emotion scripts also have the potential to be dysfunctional and if those scripts become over-learned, those same unhealthy emotions and reactions continue to perpetuate over time (Epstein & Baucom, 2002). Once over-learned, this script becomes automatic, regardless of any other specific factors or whether there is a different emotion theory that would have the situation play out a different way (Fletcher et al., 2013). The low-level, everyday nature of our results suggests that this interaction of guilt induction and accommodation could have been the result of an over-learned script, especially as the observed guilt induction (Study 1) does not seem appear overtly threatening. As we have found, depressive individuals are likely to guilt induce about minor things during an activity that could resemble any day to day interaction. It is possible that a partner might not in fact notice or sense a threat to perceived commitment, which would motivate acts of providing care and reassurance, but have simply learnt react positively in accordance with the existing joint emotional script about hurt feelings and guilt induction.

In addition to specific theoretical implications for guilt induction literature, our research also expands on existing communication research. Our findings provided direct support for the theory propounded by McNulty and Russell (2010), who theorised that communication strategies cannot simply be divided into "good" or "bad", and instead that there are costs and benefits to stereotypically positive/negative communication behaviours, dependent on the context in which they occur. We illustrated patterns of costs and benefits for guilt induction and accommodation in our research: Guilt induction was linked with more immediate partner accommodation, but has the cost of reduced accommodation following this immediate context. The relative benefit or cost of accommodation associated with guilt induction, is likely due to the contextual factor of there being no immediate threat to stability.

Accordingly, accommodating partners' negativity has been illustrated to be both beneficial and costly depending on context. Our results have suggested that it is beneficial when in the context of immediate guilt induction, to provide reassurance for a partner and avoid conflict but reflects personal costs in the long term context. This is due to the reduction in accommodation following guilt induction, which indicates that the individual who was being accommodative in response to guilt induction, likely felt decreases in commitment and satisfaction with the relationship in the following time span, which led to decreased accommodation in the long-term context. Another context in which accommodation could be costly is in a context of high levels of felt commitment, which could potentially allow for accommodation of negative behaviours to shift into tolerance of some forms of moderate violence. This range of positive and negative outcomes associated with guilt induction and accommodation, shows support for McNulty and Russell's (2010) theory that behaviours can be positive in some contexts, and negative in others.

Our findings also provide support for commitment-based theories that identify commitment as a crucial underlying reason why people seem to stay in either psychologically or physically abusive relationships (Byers, 2004, Dare et al, 2013). Guilt induction is a strategy used to appeal to partner's commitment to the relationship, and elicit a response reflecting commitment. Thus, our finding of a significant relationship between experiences of partner guilt induction and higher tolerance of moderate reciprocal violence, supports theories of commitment-based motivations leading to increased tolerate for intimate partner violence. Specifically, our results show support for the research by Arriaga et al. (2018) that identified commitment driven beliefs as allowing partners to downplay the effects and frequency of partner aggression. As their study focused on commitment driven beliefs allowing for justifications for partner aggression, our research expands further by identifying the key behaviour of accommodation as a possible mechanism by which intimate partner violence can be downplayed. This would make theoretical sense as Arriaga et al (2018) identified justifications for intimate partner violence such as that partners felt commitment towards future plans and shared friends, which is in line with motivations to accommodate such as social worth and the importance placed on the relationship (Rusbult et al., 1991).

The final theoretical implication of our research comes from our novel observational guilt induction coding scheme (Study 1) which has created a framework of low-level guilt induction behaviours in partner interactions. This contributes to the current theory on guilt induction and what it may looks like in an everyday context, and could inform understanding of its component behaviours as a relationship strategy. The observational nature of Study 1 allowed us to see what these behaviours and processes look like in real life, rather than making assumptions based on theory or self-report measures. Within this study, we saw patterns of guilt induction behaviour

that were commonly used by individuals, suggesting that we were truly capturing universal guilt induction behaviours and can therefore make assumptions about 'real world' everyday guilt induction behaviours. For example, we noticed in our study that a commonly used, low-level guilt induction tactic was diminishing the self, in order to appear weak, with statements such as "I can't do this", paired with looking hurt/upset. Higher-level guilt inductions such as crying or saying "You don't care about me at all" were not prevalent in our study, thus confirming that we were generally measuring lower-level, chronic relationship guilt induction. Our scheme could form the basis for future research to identify guilt induction within interactions.

Practical Implications

Although our study looked at depressive symptoms as opposed to clinical depression, our findings still have the potential to inform future research on symptoms of depression. Depressive symptoms are strongly linked to guilt induction behaviours, and it seems likely that individuals with depression will be exhibiting these sorts of symptoms and subsequently use guilt induction. Our findings highlight that guilt induction is often used by people who are least likely to be able to reap the intended benefits of it such as increased love and accommodation. This is because individuals higher in depressive symptoms tend to use guilt induction despite it eventually leading to partner behaviour that undermines any reassurances given. Furthermore, our results suggest that there is an increased likelihood of individuals being tolerant of moderate reciprocal violence when their partner is higher in depressive symptoms and uses more guilt induction - although this claim would require more evidence. These results should be able to inform future research on understanding behavioural factors of depression and why depressed individuals seem to have more relationship problems in general, such as increased likelihood of rejection and low relationship satisfaction (Gurtman, 1987, Whisman & Kaiser,

2008). The negative outcomes identified in former studies could be occurring in part as a result of the use of guilt induction, and are in line with our findings which show potentially lowered accommodation over time.

Assuming our results could extend to clinically depressed individuals in future research, it is important to acknowledge that guilt induction was linked with benefits in the immediate context. It follows that we cannot, or rather would not simply recommend that depressed individuals cease guilt inducting behaviours that ease relationship insecurities without providing an alternative. Prior literature highlights the idea that attempting to fully change a seemingly destructive behaviour can actually lead to negative outcomes if the underlying needs behind the behaviour are not met in some other way (McNulty & Russell, 2010; Overall et al., 2014). Therefore our results can inform future research on what good alternatives to getting love and accommodation in the long term are and encourage clinicians to teach depressed individuals to get reassurances in other, more positive and sustainable ways.

Future Directions

An important future direction is to use a longitudinal design to extend and expand on our current, mostly cross-sectional research. This will allow us to more confidently establish the direction of our variables, and observe changes in patterns of guilt induction and associated outcomes over time. We included one minor longitudinal aspect to our research, whereby we examined accommodation behaviours at an immediate time span, and in the following 30 second time span (Study 1). However, as we only examined accommodation within the context of one interaction between partners, we cannot know for sure if this decrease in accommodation would remain over time, or change again at a later time point. Data from a cross-sectional time point and longitudinal time point would allow us to get clarification on what the exact outcomes of

guilt induction are. It is very important to clarify whether accommodation does switch from increasing in the moment in response to guilt induction, to then decreasing long-term. Although our results can give an indication of this being the case, we are not able to make assumptions about long term effects with sufficient certainty. Furthermore, a longitudinal, entirely observational design would ensure that guilt induction and any associated outcomes could be tracked over time, without any biases that come with self-report or partner perceptions that we may have seen in Study 2. Biases can often occur due to the nature of emotions, which tend to surge and then dissipate, resulting in inaccuracies when remembering and reporting them.

Also, people's own beliefs about what they *should* be feeling, as opposed to what they actually feel, can impact self-report measures and cause inaccuracy (Robinson & Clore, 2002). An extension of our study using this design would enable a more in-depth and accurate analysis of the chronic nature of guilt induction, and the nature of its short term *and* long-term consequences.

One ongoing question in guilt induction research is whether or not people are aware of, or even *intentionally* use, guilt-inducing strategies. Early research by Baumeister et al. (1995) suggested that guilt induction is a deliberate strategy employed within intimate relationships. For example, an individual knowingly exaggerating the effect of their partner's actions on themselves, by saying "You ruined my day!" after a mild inconvenience, in order to influence a partner to do what they want. Other authors have argued that guilt indication can also occur unintentionally or accidentally (see Miczo, 2015; Vangelisti et al., 1991). For example, an individual is feeling sad and openly expresses this to a partner, which appeals to the partners concern and elicits a guilt response. Both of these situations may induce guilt in a partner, but the former seems far more calculated. Vangelisti et al. (1991) further suggested that when guilt

induction was used intentionally, people tended to underestimate how much they were using it and the effect it could be having. Research around this point remains inconclusive. The assumption in our research was that guilt induction could be both intentional and unintentional, which we captured in our coding scheme. We included more direct types of guilt induction which appeared to be intentional, such as blaming a partner for performing poorly on the task and more indirect, seemingly unintentional examples such as non-verbal expressions of distress (e.g. brow furrowing), or verbalisations of natural confusion about the task. Theoretical explanations for both perspectives could be consistent with our coding scheme and subsequent results.

Future research could directly assess the intentionality and self-awareness of guilt induction strategies by extending our observational methodology (Study 1). Specifically, researchers could include self-report measures of guilt induction alongside behavioural observations when two people discuss a relationship problem or disagreement. Participants could first be prompted on what the discussion will be about and write down their primary goals for the interaction to establish pre-emptive motivations. After the discussion about the relationship problem, participants could reflect on communication behaviours, their reasoning behind those behaviours, and the perceived influence of those behaviours on their partner. In doing so, this research could provide a picture of whether guilt induction is being used intentionally or unintentionally—based on assessing their reported behaviours and motivations (e.g., feeling hurt made them want to retaliate by making their partner feel guilty versus made them want to feel reassured and loved) and the observations of their behaviours from objective coders.

A final idea for future research is to look at forgiveness within this model of behaviours. Forgiveness is a conceptually similar behaviour to accommodation. It also involves inhibiting a

natural response to a partner transgression (e.g. retaliation or relationship dissolution), and rather responding constructively for the good of a relationship (Miller et al., 2008). However, it differs in that it involves actively acknowledging and forgiving a partner transgression, rather than essentially ignoring it as with accommodation. The most prominent negative outcome that results from forgiveness is repeat transgressions. This could apply to instances of intimate partner violence. For example, if an individual forgives a partner slapping them, whilst this ensures that the relationship stabilises, the violence may recur. If the partner was forgiven once and absolved of their guilt, arguably a precedent of forgiveness is established. Forgiveness has been found to enable individuals to remain in abusive relationships, and even in cases where a partner may leave the abusive partner, a tendency for forgiveness makes individuals significantly more likely to return to the abusive relationship (Exline & Baumeister, 2000; Gordon et al., 2004). This research suggests forgiveness can allow for serious negative partner behaviour to be repeated or perhaps even perpetuated in the long term. Future research could identify whether, as with accommodation, guilt induction leads to greater forgiveness, and consequently whether this can increase tolerance of intimate partner violence. This may potentially present another mechanism by which accommodation of negative partner behaviours such as guilt induction can slip into increased tolerance of intimate partner violence.

Strengths and Limitations

The observational design of Study 1 was a major methodological strength as it allowed us to code for negative behaviours such as guilt induction ourselves, as opposed to relying on self-report. Accordingly, the use of a survey design for Study 2 was a limitation of this study. It is possible that relying on individuals to rate their partner's depressive symptoms and use of guilt induction based on their perceptions could result in more bias than using coders that are

impartial. In order to ascertain these partner perceptions, an accurate perception of partner emotions and thoughts is required, which is known as empathic accuracy (Ickles, 1993; Kilpatrick et al., 2002). Empathic accuracy can vary depending on relationship satisfaction within a relationship, and a partner's ability to recognise and intuitively understand the other's affective state (Mast & Ickes, 2007; Thomas et al., 1997). Emotional knowledge could also be obtained through communication, and could therefore be dependent on the efficacy of communication between partners. Some behaviours or emotions might be underreported. It is possible that in some cases, depressive symptoms are occurring in a partner, however if they are not communicated, then they will not be reported.

Our results are also constrained by the contexts in which we observed guilt induction. Study 1 examined guilt induction within a communication game that reflected low-level guilt inductions that likely happen daily. This means that our results are not applicable to high levels of guilt induction or discussions of serious relationship problems. For example, behaviours that occur in relationship conflict could include intense appeals to the partner's love and concern such as "You have never loved me!". It is possible that partners in Study 1 were more inclined to respond to guilt induction with accommodation, as opposed to retaliating, not only because accommodation is typically employed in response to destructive behaviour, but also because of the relatively mild nature of the negativity (Rusbult et al., 1991). However, this constraint did not affect the aims of this study as our main focus was on everyday use of guilt induction.

Furthermore our results demonstrated that low-level guilt induction has the potential to be influential and predict certain changes in partner behaviour and cognitions. Additionally, Study 2 captured a broader range of guilt induction by using a validated measure of general relationship experiences of guilt induction (see Vangelisti et al., 1991). Patterns of individuals emphasising

hurt feelings and "making a big deal out of problems in order to get reassurances and care, was replicated across a specific observed interaction (Study 1) and more generalised experiences of partner behaviour (Study 2).

Another limitation of this study is that we cannot be certain of the directionality of behaviour, due to the cross-sectional nature of both studies. We assumed that the direction of variables followed the pathway of greater depressive symptoms leading to more guilt induction, which then resulted in more partner accommodation and tolerance for moderate reciprocal violence. This assumption follows a common sequence in which stable traits, such as depressive symptoms, motivate particular goals and behaviours (e.g., Duffy & Martin, 1994), and it is also consistent with the directionality assumed in prior research on guilt induction (e.g., Overall et al., 2014; Rakow et al., 2009). Furthermore, guilt induction functions to elicit renewed commitment in a partner, and accommodation and tolerance of intimate violence are behaviours associated with commitment-based motivations (Arriaga et al., 2018; Rusbult et al., 1991), which supports our directional modelling. Nevertheless, the variables that we investigated are likely to influence one another reciprocally. For example, increased tolerance for intimate partner violence and actual victimisation of violence has been associated with increases in depression (Devries et al., 2013; Dodd, 2009). Furthermore, parental guilt induction has been linked to increases in child depressive symptoms (Donatelli et al., 2007). To enable researchers to assess reciprocal associations from one time point to the next, and thus gain evidence for directionality, a longitudinal extension to this research (as proposed above) would be required.

Depressive symptoms were generally low in our participants, which is indicative of the sub-clinical student samples that were used. Thus, we cannot technically extend the ambit of our findings to apply to people who are clinically depressed, or their use of guilt induction.

Nonetheless, theory suggests that depression could be linked with intimate partner guilt induction, with prior developmental research linking maternal clinical depression to increased use of guilt induction (Donatelli et al., 2007). In addition, research has found that clinical depression is linked with increased familial and partner tolerance of negative behaviours and accommodation (Amir et al., 2000). Theory and prior research suggest that our results, based on individuals higher in depressive symptoms, may also reflect a relationship between clinical depression and guilt induction. We consider that future research could expand further on this study by assessing the same links within a clinically depressed sample.

A notable limitation on the generalisability of our findings is the homogeneity of our sample. Our sample for Study 1 was primarily young adults who were students at Victoria University, and the sample for Study 2 consisted of first year students who were primarily around 18 years old. This is a narrow age group to be focusing on, and prior research suggests that this is an age bracket more vulnerable to depression. Late adolescence to young adulthood is a life stage at which depressive symptoms are very prevalent, as well as being the predominant age of onset of major depressive disorder (Hankin et al, 1998; Hankin & Abramson, 2002). This could mean that our results indicate greater levels of depressive symptoms and consequent guilt induction than would present in a more diverse sample. Yet this seems unlikely as we generally found low/moderate levels of depressive symptoms and guilt induction, as we would expect in any sample completing this study.

An additional limitation regarding generalisability is the use of only New Zealand based samples. Across both studies our samples are predominantly WEIRD (western, educated, industrialised, rich and democratic; Henrich et al., 2010), which indicates that our findings may not be generalisable across a greater range of cultures. Collectivist cultures value an

interdependent view of self, whereby individual identities are relatively less important than group identity, and conformity to relational norms is emphasised over individual goals (Kim & Markus, 1999). Thus, it is considered less acceptable or normal for individuals to bring up personal problems directly, which makes it likely that people would use indirect behaviours to obtain reassurance (Kim et al., 2006). It is also possible that accommodation may be used less because destructive behaviours like guilt induction are less openly expressed within an intimate relationship. However, interestingly; collectivist beliefs include that individuals are bound to each other and the other's needs are prioritised above the individual—which would suggest that negative behaviours must be tolerated, thus perhaps accommodation would be common (Kim & Markus, 1999). Despite a lack of cross-cultural research on guilt induction in intimate relationships, there is research on parental guilt induction across individualist and collectivist cultures (Fung & Lau, 2012). Parental guilt induction tends to be more common in collectivist cultures than in individualist culture, and associated with less maladaptive outcomes (e.g., internalising problems, lowered self-esteem) for a child (Fung & Lau, 1999; Rudy & Halgunseth, 2005). This is likely due to parental guilt induction being a more normative behaviour, as well as used for the purpose of encouraging interdependent thinking in line with the culture (Rudy & Halgunseth, 2005). Conversely, parental guilt induction in individualistic cultures instead commonly reflect maladaptive parental cognition/emotions (e.g., depression; see Donatelli et al., 2007). Cross-cultural research examining whether this same pattern of more guilt induction, yet less maladaptive consequences, exists in intimate relationships would expand further on crosscultural knowledge of guilt induction.

Conclusion

This thesis examined who may be more likely to use guilt induction within intimate relationships and what possible adaptive and maladaptive outcomes are associated with the use of this behaviour. Findings from two studies supported the prediction that higher levels of depressive symptoms would predict greater use of guilt induction within relationships (*Hypothesis 1*). We also found support for the prediction that use of guilt induction would elicit feelings of guilt and commitment-based motivations, which would result in more accommodation of negative behaviours from the partner (*Hypothesis 2*). Lastly, we predicted that greater partner guilt induction would lead to higher tolerance for intimate partner violence. This was a claim found to be supported in the context of one particular type of intimate partner violence, which was moderate violence in response to partner aggression (reciprocal), thus showing partial support for Hypothesis 3. Findings also revealed an interesting occurrence of relatively decreased accommodation in the 30-second time block after the immediate time point at which guilt induction occurred.

These results indicate that guilt induction is a behaviour used not only by anxious individuals, as established in prior literature, but also individuals higher in depressive symptoms for reasons stemming mainly from personal and relationship insecurity. Our results for outcomes relating to guilt induction imply that while guilt induction may ease the immediate insecurity of the individual using it through partner accommodation, the consequences may be negative after this immediate response. Furthermore, our finding of a link between experiences of partner guilt induction, and tolerance of moderate reciprocal intimate partner violence indicates on that commitment based motivations elicited by guilt induction could result in not only more accommodation of negative behaviours, but intimate partner violence. This research indicates

how people higher in depressive symptoms, tend to use strategies such as guilt induction in order to feel reassured, and yet ultimately can experience the opposite effect.

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