Investigating Mechanisms of Social Offloading using a Joint Negative Priming Task

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Abstract

When sharing tasks, individuals may reduce internal demands by offloading task processing to others – *social offloading*. Studies have revealed facilitated performance when people believe a jointly acting partner is responsible for task distractors. A proposed mechanism underlying this effect is selective attention. We investigated this using a joint location negative priming (NP) paradigm. In NP tasks, participants initially respond to targets while ignoring distractors (prime phase); at a subsequent probe phase, responses are typically slower to targets in prime distractor locations, reflecting lingering inhibition – the NP effect. Participants (N = 80) completed the task either alone, or believing a partner was responding to distractors. Following a selective attention account, we predicted prime target facilitation followed by increased NP in the joint condition. While results did not reveal facilitation, NP was significantly increased. We propose that these findings demonstrate the way social contexts can shape selective attention to support distributed working.

Keywords: Social Offloading; Joint Action; Inhibition; Selective Attention

Introduction

When two people work together on a shared task, their behaviours and cognition are shaped by one another. For example, tennis partners in a game of doubles keep track of each other's roles, attentional states, actions and intentions, while ensuring that certain tasks – such as hitting the ball from the net versus from the baseline – remain distributed between them. Over 20 years of research into joint action – where partners coordinate actions to achieve shared goals – has indicated many ways in which this shaping occurs, revealing common differences in patterns of information processing when working alone compared to during joint action (Sebanz & Knoblich, 2021; Gallotti & Frith, 2013).

One line of research has focused on the way individuals automatically *prioritise* information relevant to a partner's role – even when irrelevant to their own. This may involve representing a partner's action plans (Sebanz et al., 2003); it may also involve devoting cognitive resources to targets of partner action (Shteynberg, 2015). For example, Elekes et al. (2016) showed pairs of participants a sequence of words from three categories, with each partner responsible for counting words from a different category. In a subsequent surprise recall test, participants showed greater recall of partner-target words than words no one counted, suggesting prioritisation of partner-relevant information. Across joint action paradigms, similar findings indicate prioritisation of partner-relevant information, even when irrelevant – or even interfering with – a participant's own role (Böckler et al., 2012; Dötsch et al., 2022). This prioritisation may represent an adaptive tendency to maintain common knowledge between partners (Sebanz et al., 2006; Constable et al., 2019).

In contrast, a recent parallel line of research has focused on the ways that individuals *deprioritise* partner-role-relevant information (Tufft & Richardson, 2026). Returning to the tennis players, each partner's efficiency in performing their own role is improved by leaving aspects of a shared task – e.g. chasing a ball near the net – to their partner. At the cognitive level, allowing a partner to take responsibility for processing part of a shared task may also improve one's own role performance – for instance, letting a partner attend to the left of the court so one can focus on the right.

The idea of cognitive offloading – reducing cognitive demands using physical action outside of one's internal processing – is well-established (Risko & Gilbert, 2016). However, as the tennis case illustrates, another *person's* cognitive processing may *also* be used to reduce cognitive demands – a process termed *social offloading*: 'the use of social interactions to reduce an individual's internal cognitive demand by leveraging the cognitive resources of other human agents mutually engaged on a shared task' (Tufft & Richardson, 2026).

Social offloading is associated with teamwork, when partners take distinct roles while working towards shared goals (Hutchins, 1995). Such offloading may be strategic, for instance, when partners agree to remember different pieces of information during a joint memory task (Wegner et al., 1991; Armitage et al., 2025). However, recent studies indicate patterns of social offloading occurring *automatically* (Tufft & Richardson, 2026).

Varied paradigms have provided evidence of automatic social offloading (Tufft & Richardson, 2020; Weis et al., 2025). One key paradigm is the picture-word interference (PWI) paradigm (Rosinski et al., 1975). In the traditional PWI paradigm, a solitary participant responds to pictures while ignoring overlayed distractor words. Distractors of greater semantic relatedness to targets typically prompt longer response times – a semantic interference effect. In a social version of this task, however, when a partner perceived as competent was assigned specific responsibility for

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responding to distractor words, semantic interference effects appeared removed for participants. This suggests that simply knowing a partner is responsible for processing distractor information may allow deprioritisation of that information, reducing interference effects, thus facilitating participant performance (Tufft & Richardson, 2026; Sellaro et al., 2020).

While PWI studies give evidence for the involvement of automatic processes in social offloading, the underpinning mechanisms are undetermined. One strong candidate is attention (Tufft & Richardson, 2026). Attention to targets and distractors during PWI tasks may be modulated when distractor information is assigned to a partner, with reduced attention toward partner distractor information producing reduced interference. It has been suggested this modulation may operate through active inhibition of distractor information as evidenced by time-course analyses of social PWI interference effects (Tufft & Richardson, 2020).

Location Negative Priming and Joint Action

To understand whether inhibition of attention is involved in social offloading, it would be helpful to develop a task with the same structure as previous social offloading studies but incorporating a specifically attentional paradigm. An ideal candidate for such a paradigm is the location negative priming (NP) paradigm (Tipper et al., 1990). Like the PWI, the NP paradigm involves simultaneous presentation of targets and distractors. Unlike the PWI, however, the NP paradigm also reveals downstream inhibitory after-effects of distractor processing that may help to determine the mechanisms involved in social offloading.

In classic NP studies, a solitary participant is shown a 'prime' display with a target to respond to in one location simultaneous with a distractor in another. After an interval, the participant must respond to a second target in a 'probe' display. There are two standard findings: firstly, reactions to probe targets in the same location as prime targets tend to be faster than probe targets in previously unoccupied locations; secondly, when probe targets are in the same location as prime distractors, probe response times are slower than when probe targets appear in previously unoccupied locations. This latter phenomenon is the NP effect (Frings et al., 2015). A widely held explanation for the NP effect is that attentional systems inhibit attention towards prime distractor locations to facilitate target selection at the prime, and this inhibition lingers, impairing responses to subsequent probe targets at those locations (Tipper, 2001).

Joint-action NP tasks have previously been developed. These have been designed such that a participant responds to the probe after their partner responds to the prime. Such studies have found NP to be maintained in the probe, even though participants did not themselves react to the prime (Welsh & McDougall, 2012). This, combined with further evidence of NP patterns indicating that participants take on a partner's perspective (Frischen et al., 2009), suggests that participants prioritise partner information at the prime, adopting their partner's role and covertly selecting prime targets and inhibiting prime distractor locations.

These prioritisation effects may nonetheless be an outcome of these studies' design where participant and partner take turns to respond. Turn-taking paradigms are typically associated with prioritisation of partner information (Tufft & Richardson, 2026). In contrast, social offloading effects are associated with tasks where partners *simultaneously* respond to *different* information, mirroring the structure of real-life distributed systems (Hutchins, 1995).

The key question then is: when a NP task is split so that a participant is responsible for the prime target and a partner responsible for the prime distractor, does this produce effects indicative of social offloading?

These effects would be expected to produce two outcomes. Firstly, the standard inhibitory account of NP posits inhibition of prime distractor information in order to reduce distractor interference, thus facilitating prime target selection (Tipper, 1985, 2001). However, if social offloading is hypothesised to induce *further* distractor inhibition, we would expect *further* target response facilitation when distractors are a partner's responsibility. In line with PWI findings, such facilitation may be represented by faster responses to prime targets (Tufft & Richardson, 2026).

While faster prime responses would be consistent with social offloading as involving inhibition of partner information, non-inhibitory explanations may also be offered for prime facilitation – perhaps involving increased salience of self-related information in social contexts, or early filtering of distractor information (Sui et al., 2012; Tufft & Richardson, 2020). An advantage of the NP paradigm, however, is that increased distractor inhibition at the prime should also be revealed through increased NP at the probe. (Tipper, 1985, 2001). Therefore, if social offloading involves distractor inhibition, we can expect a second outcome of increased NP effects when a partner takes responsibility for prime distractors.

The Current Study

The current study investigated these questions via an online NP task. The study had two conditions: a non-social condition, where participants undertook a NP task alone; and a social, where they were told they were working with an online partner responsible for responding to prime distractors.

In both conditions, participants responded to both prime and probe targets, the only difference being the belief that a partner was responsible for responding to prime distractors in the social condition. It was hypothesised that, when the prime distractor was made the responsibility of a partner, this would produce effects consistent with social offloading and a division of cognitive labour.

This led to two key predictions. Firstly, we predicted that in the social condition, where prime distractors are assigned to partners, the task of responding to prime targets would be facilitated, leading to reduced prime reaction times (RTs).

Secondly, if social offloading occurs at the prime, and the mechanism is inhibitory, we predicted greater inhibition of distractor locations when the prime distractor is the responsibility of a partner versus when participants work alone, leading to an increased NP effect.

Against this, a *prioritisation* account could be developed suggesting that the social relevance of the distractor in the social condition should increase its salience (Dötsch et al., 2022). This would predict an opposite pattern of results in the social condition, with increased prime distractor interference slowing responses to prime targets, and a smaller NP effect as attention remains drawn towards distractor locations.

Nonetheless, the current study adopts similar principles to previous social offloading studies: firstly, partners with clearly separate roles are instructed to work as a team (Hutchins, 1995); secondly, responsibility for target and distractor information is split between participant and partner (Tufft & Richardson, 2020; Weis et al., 2025). Thus, we predict outcomes consistent with division of cognitive labour.

Methods

Participants

A required sample size of 76 participants was calculated using G*Power (Faul et al., 2009) for a 2 x 2 mixed design, medium to large effect size (Tufft & Gobel, 2022), 80% power and.05 criterion for statistical significance.

A total of 90 UK resident participants, aged between 18 and 65 with normal eyesight, were recruited via the Prolific (www.prolific.com) online participant pool and paid £10.50 per hour (median completion time: 24 minutes).

Several participants were excluded from analysis: one experienced technical issues; one had previously seen the confederate video; one failed to identify their experimental condition. Others were removed through planned exclusion criteria: three for poor task performance (accuracy below 70%); two for poor engagement (completing under 75 out of 144 trials). To remove outliers, participants outside a median absolute deviation (a robust means outlier detection; Leys et al., 2013) of 4 were excluded. Two outliers were removed.

This left 80 participants (53 female, 27 male; M = 35.6 years old, SD = 10.3): 39 in the non-social condition (22 female, 17 male; M = 34.1 years old, SD = 9.8); 41 in the social (31 female, 10 male; M = 37.0 years old, SD = 10.6).

Design

The study had two independent variables. Firstly, the between-subjects variable of *Social Context* with two conditions: *social* and *non-social*. Secondly, the within-subjects variable of *Probe Condition* with three levels: in the *ignored repetition* (IR) condition, during the NP task, the probe target was in the same location as the prime distractor; in the *control* condition, the probe target was in a previously unoccupied location; in the *target repetition* (TR) condition, the probe target was in the same location as the prime target.

To address our first prediction of faster and more accurate RTs to prime targets in the social condition, a between-subjects design was used with the factor of *Social Context* at two levels (social versus non-social) and the dependent variable of RTs to prime targets.

To address the second prediction that the NP effect will be greater in the social condition, a 2 x 2 mixed design was developed, with the between-subjects factor of *Social Context* (social versus non-social) and the within-subjects factor of *Probe Condition* (IR vs control). NP is measured by the degree to which probe RTs in the IR condition are slower than the control. As TR was not relevant, it was not included in analysis. The dependent variable was RTs to probe targets.

Materials

Apparatus: The experiment was run online using the Gorilla platform (Anwyl-Irvine et al., 2020). Participants had to access the study using Google Chrome on a laptop or desktop.

NP Task: The NP task was structured as follows (see Figure 1). For each display, the screen was divided into four equal black quadrants of 944 x 531 pixels, with an empty white square 226.8 x 226.8 pixels in the centre forming frames in which targets and distractors appeared. To clarify the role of each participant in a narrative, icons representing a dog's face were used for targets and a cat's for distractors.

Task timings were based on Welsh and McDougall (2012). In each trial, participants were shown the message 'READY' for 1000ms. Four quadrants with empty frames then appeared with a central fixation cross for a further 1000ms.

In the prime phase, the fixation cross disappeared and the prime target and distractor occupied two of the frames for 150ms (Tipper et al., 1990) after which frames emptied. From the appearance of the target and distractor, participants had 1000ms to respond with a keypress – 'D' for top left targets, 'K' for top right, 'C' for bottom left and 'M' for bottom right. A fixation cross then reappeared for 250ms.

In the probe phase, only the probe target (the dog) appeared. While most NP studies include a probe distractor (Frings et al., 2015), this was not included given the potential confounding influence of a socially relevant distractor alongside the probe target. NP effects have previously been demonstrated without a probe distractor (Chao, 2009), a finding confirmed in pilot studies. The probe target appeared for 150ms, followed by a blank frame for 1100ms, during which participants could respond with the same keypresses.

Joint NP Task Set-up: To create a joint version of the NP task, it was embedded in instructions emphasising separate roles and shared goals of the participant and their partner.

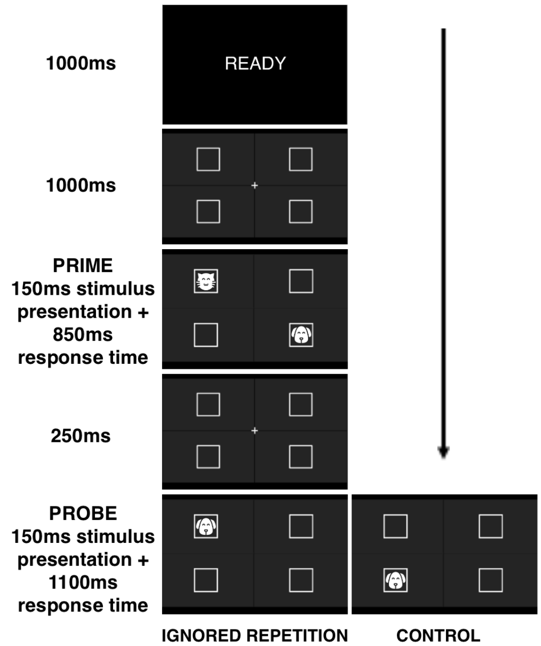

Figure 1: Time course of NP task showing IR and control conditions (icons by deemakdaksina, www.flaticon.com)

Participants in the social condition were told that they were playing a 'game' with the aim of finding either Dreyfus the Dog or Charlotte the Cat, lost in a park represented by NP task displays. Participants were also told they would be playing with another player online, that each player would look for a different animal, and 'To achieve the best results, you and your partner will be splitting the search task. It is in your best interest to distribute the workload efficiently!'

Participants were then informed that they would be allocated to either the 'Police Officer' role – responsible for responding to the cat – or 'Park Ranger'– responsible for the dog. To distinguish roles, instructions relating to the Police Officer were always blue, the Park Ranger green.

Participants were then reminded: 'Your performance (along with your partner's) will contribute to your team's overall performance' before being allocated to the Park Ranger role. Participants were instructed to: 'respond to the location of the dog when it appears' and 'ignore the cat since your partner will be handling it'.

Next, participants were informed they would be introduced to a partner in the Police Officer role. This introduction was conducted via an online social manipulation.

Online Social Manipulation: Participants in the social condition were led to believe they were playing with another player, when in fact they were working alone. This belief was created by adapting a manipulation previously shown to be successful in creating belief in an online partner's presence (Tufft & Richardson, 2026; Tufft & Gobel, 2022).

After being informed they would meet the 'Police Officer', participants were instructed to 'log in' to the game by typing their name into a text field. After pressing 'enter', a circle 'avatar' appeared at the top of the screen representing the participant with a green outline to represent the Park Ranger and their name in the centre above the word 'online'. This avatar appeared throughout NP tasks.

Participants were then told the Police Officer would join the game. A text field for the partner's name appeared, into which 'Chris' appeared typed by another person (typing was pre-recorded). Another circle appeared, representing the partner's avatar, with a blue outline for the Police Officer role, and 'Chris' and 'online' in the centre. This appeared throughout as a reminder of the partner's presence.

Participants then 'met' the other player: thus, they saw the muted live feed of their own webcam in a window alongside another showing a three-second silent webcam recording of a 43-year-old white man smiling and waving. This aimed to create the impression of a real person present online.

General Procedure: Participants gave consent, were asked to maximise their browser, and were randomly allocated to the social or non-social conditions. In the social condition, participants were warned they would meet another participant online and could quit if uncomfortable.

Participants in the social condition were then introduced to the joint NP task, informed of the Park Ranger and Police Officer roles, and allocated the Park Ranger role. In the non-social condition, participants were simply allocated the Park Ranger role which was to find the dog and ignore the cat.

Following instructions on keypresses, participants in both conditions undertook solitary practice NP task trials: 18 in the non-social condition, 12 in the social (more practice follows). After practice trials, participants were given accuracy scores and told their speed was 'average'.

Participants in the social condition then experienced the online social manipulation. In the non-social condition, participants logged in, and a participant avatar appeared, but no partner was introduced.

Participants in the social condition then undertook six practice trials as the Park Ranger working alongside the Police Officer. At the end of practice trials, participants were told: 'Well done! You worked well as a team! Remember: teams get the best scores when they split the task!'

Participants then undertook 144 experimental trials of the NP task in four blocks of 36. There were equal numbers of IR, control and TR trials with order randomised. On break screens, participants were reminded of roles; in the social condition, during the second break, the participant's webcam feed and a video of their partner appeared within their avatar circles as a reminder of partner presence.

Finally, demographic information was taken and manipulation checks ensured that participants could identify their experimental condition and could see their partner during the 'meeting'. Participants were then debriefed, including on deception involving an unreal partner.

Results

In total 11,509 trials of the NP task were completed following participant exclusions. Data was subsequently filtered to remove trials with inaccurate responses (9.45% of data) and responses under 200ms (response anticipation) (0.77% of data). This left 10332 trials.

To examine the prediction that prime RTs would be faster in the social condition than the non-social, a one-way analysis of variance (ANOVA) was conducted on prime RTs with *Social Context* as a between-subjects factor with two levels (social vs non-social). No significant effect of *Social Context* was found: $F(1, 78) = 0.10$, $\eta p^2 = .001$, $p = .76$. Estimated marginal means via the emmeans package (Lenth et al., 2025) showed mean RTs as close in the social (M = 521.57ms, SE = 9.87ms) and non-social (M = 525.99ms, SE = 10.12ms) conditions.

To examine the second prediction that NP effects would be greater in the social than non-social condition, probe reaction times were analysed via a 2 x 2 mixed ANOVA with *Social Context* as the between-subject factor with two levels (social vs non-social), and *Probe Condition* as the within-subjects factor with two levels (IR vs control; see Figure 2).

A significant main effect was found for *Probe Condition*: $F(1,78) = 169.37$, $\eta p^2 = .68$, $p < .001$. Estimated marginal means revealed probe RTs in the IR condition (M = 455.63ms, SE = 9.33ms) to be slower than in the control condition (M = 426.03, SE = 8.45), indicating an overall NP effect. There was no main effect of *Social Context*: $F(1, 78) = 0.07$, $\eta p^2 < .001$, $p = .79$.

Crucially, there was also a significant interaction between *Social Context* and *Probe Condition*: $F(1, 78) = 4.65$, $\eta p^2 = 0.56$, $p = .034$. Planned post-hoc comparisons comparing IR and control probe RT scores in each *Social Context* condition revealed a significant NP effect in both the social ($t(78) = 7.58$, $p < .001$) and non-social ($t(78) = 10.86$, $p < .001$) conditions, (social condition estimated marginal means: M_{IR} = 460.31ms, SE_{IR} = 13.09ms; $M_{control}$ = 425.95ms, $SE_{control}$ = 11.88ms; non-social: M_{IR} = 450.72ms, SE_{IR} = 13.43ms; $M_{control}$ = 426.12ms, $SE_{control}$ = 12.18ms).

While both *Social Context* conditions saw a NP effect, the interaction was driven by a larger NP effect in the social condition. In the social condition, IR probe RTs were delayed by 34.37ms (SE = 3.16ms) compared to controls, while in the non-social condition, this delay was 24.60ms (SE = 3.24ms). This is in line with the prediction that the NP effect would be greater in the social than non-social condition.

To check that there were no speed-accuracy trade-offs, the same analyses were conducted for both prime and probe target accuracy rates (% correct). No significant main effects or interactions were found (all Fs < 0.8, ps > .38).

For completeness, TR condition probe RTs are reported: as is common in most NP paradigms (Frings et al., 2015), mean RTs in the TR condition were faster than controls in both the social (M_{TR} = 407.27ms, SE_{TR} = 10.60ms) and non-social (M_{TR} = 398.97ms, SE_{TR} = 10.87ms) conditions.

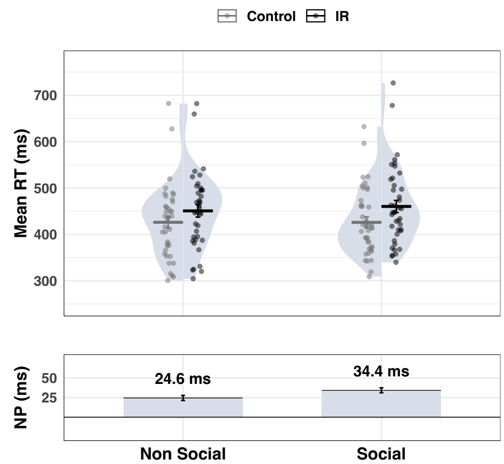

Figure 2: Mean probe RTs (ms) by Social Context and Probe conditions; Levels of NP effect (ms) by Social Context; Error bars represent SEM

Discussion

The current study produced two key findings. Firstly, at the prime phase, there was no significant difference in prime RTs between the social condition, where a partner was believed to be responsible for responding to prime distractors, and the non-social, where participants believed they acted alone. This appears inconsistent with the prediction that assigning a partner responsibility for distractor information would facilitate responses, reducing prime RTs.

Secondly, probe RTs in the IR condition were significantly slower than in the control, and this difference was greater in the social than non-social condition, indicating a greater NP effect. This supports the second prediction that assigning responsibility for distractors to a partner may increase NP.

These findings have several implications. For one, the paradigm successfully produced NP effects without probe distractors (Chao, 2009). Remarkably, it also demonstrated that NP is influenced by minimal social information, supporting previous social NP work (Frischen et al., 2009; Welsh & McDougall, 2012), but demonstrating such effects without a partner physically present.

The lack of a difference in prime RTs between the social and the non-social conditions, however, is inconsistent with the social offloading prediction, based on previous PWI studies, by which responses to prime targets are facilitated when distractor items are taken care of by a partner. Nonetheless, the finding of increased NP in the social condition *is* consistent with predicted deprioritisation, rather than prioritisation, of partner-relevant information via inhibition of prime distractor information.

One explanation for this pattern of results may be that inhibition takes time to develop (Tufft & Richardson, 2020).

Distractor interference studies (Sharma et al., 2010) have found evidence of inhibition effects taking 1000ms to manifest, longer than the current study's mean prime RTs of just over 520ms. While inhibition may be induced at the prime, it may not produce measurable effects until the probe. Thus, social offloading facilitation may only be apparent in paradigms like the PWI that allow more processing time.

An alternative explanation is that inhibition is not involved in NP at all. While the inhibitory explanation of the NP effect is widely held, other theories hold that NP represents a memory phenomenon (Mayr & Buchner, 2007). On the episodic retrieval model, for instance, it is suggested that at the prime phase, the distractor location is encoded with 'not-to-be-responded-to' information. Presentation of a similar probe display then cues retrieval of the prime episode, including the 'not-to-be-responded to' information which interferes with the task of responding to the prime distractor location in the IR condition, causing delay (Neill et al., 1992). Thus, NP is explained without inhibition of prime distractors.

An episodic retrieval model could explain the findings of the current study by suggesting that increased NP in the social condition is due to additional information being encoded about the prime distractor location – it is 'not-to-be-responded to *and* someone-else's-responsibility'. Retrieval of this additional information in the probe IR condition may cause even greater interference, and thus larger NP.

However, it should firstly be noted that, following decades of research, there is a consensus that *both* inhibition and retrieval are involved in NP (Tipper, 2001; Frings et al., 2015). Secondly, a key argument for episodic retrieval models is that similarity between probe and prime displays cues retrieval of the prime memory trace during the probe. This has led to the suggestion that probe displays that are dissimilar to primes – including those lacking distractors – should not produce NP (Frings et al., 2015). However, the current study found NP without probe distractors, undermining such an episodic retrieval explanation. Nonetheless, future research should attempt to disentangle the roles of inhibition and retrieval in social NP.

Even accepting an inhibitory account, another alternative explanation could be offered: perhaps distractors in the social condition are *prioritised* and become more salient, and thus more distracting (Dötsch et al., 2022). This increased interference then leads to increased NP as additional inhibition is required to select against prime distractors (Wyatt & Machado, 2013). Although this explanation contrasts with the hypotheses of this study, it remains consistent with partner information ultimately being *deprioritised* via inhibition.

Another way to make sense of the idea that division of attentional labour in a NP paradigm leads to inhibition of partner information without facilitating prime performance can be found in parallels with social studies on the attentional phenomenon of inhibition of return (IOR; Posner et al., 1985; Tufft et al., 2015; Gobel et al., 2018; Tufft & Gobel, 2022). Such parallels may explain the current findings in ways still consistent with a narrative of attentional labour automatically divided with a partner.

Classic IOR studies show solitary participants as slower to respond to a location recently cued compared to one uncued. This is often explained as due to the attentional system being set up for exploration, thus inhibiting attention towards previously attended areas (Klein et al., 2023). In a social version of an IOR task, however, when participants were told a cue represented *the gaze location of a partner*, they became *even* slower to react to targets in cue locations (Tufft et al., 2015; Gobel et al., 2018; Tufft & Gobel, 2022). This suggests partners automatically split the task of exploring a new environment, increasing inhibition towards locations to which a partner has already attended.

The current NP findings may parallel social IOR, with participants inhibiting locations attended by partners – the difference being that in NP, inhibition of partner locations is *simultaneous* with participants selecting their targets. This NP finding is consistent with the idea that attentional systems deprioritise locations attended by partners – whether in the past or present – via inhibition, allowing more efficient joint exploration of an environment. Thus, even if giving responsibility for distractors to a partner fails to facilitate target selection, it may indicate an inhibitory mechanism facilitating joint exploration through automatic division of attentional labour. The relationship between social IOR and social NP requires further exploration.

There may be concerns that our social and non-social conditions differ in systematic ways unrelated to partner distractor responsibility. For instance: social facilitation /inhibition effects induced by mere partner presence (Belletier et al., 2019); effects of greater perceived complexity of the social task (McLaughlin et al., 2010); or effects of describing the Police Officer role – a concern given evidence that simply imagining partner roles can induce joint action effects (Brillinger et al., 2025).

To control for such features, future NP studies could compare two *social* conditions. This has been undertaken with PWI, showing social offloading effects modulated by perceived partner competence, with offloading only occurring with a competent partner (Tufft & Richardson, 2026). Similarly, manipulating partner competence in a NP study may reveal effects consistent with social offloading only when a partner is perceived as competent.

The current study offers a novel social NP design and reveals modulatory effects of social context when a prime distractor is made the responsibility of a partner on a shared task. While the pattern of results at the prime phase did not mirror facilitation found in social PWI studies, evidence was found of inhibition of partner information, consistent with social offloading and the division of attentional labour. These findings add to a growing body of work indicating the attunement between social contexts and automatic processes of cognition (Kingstone et al., 2008).

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