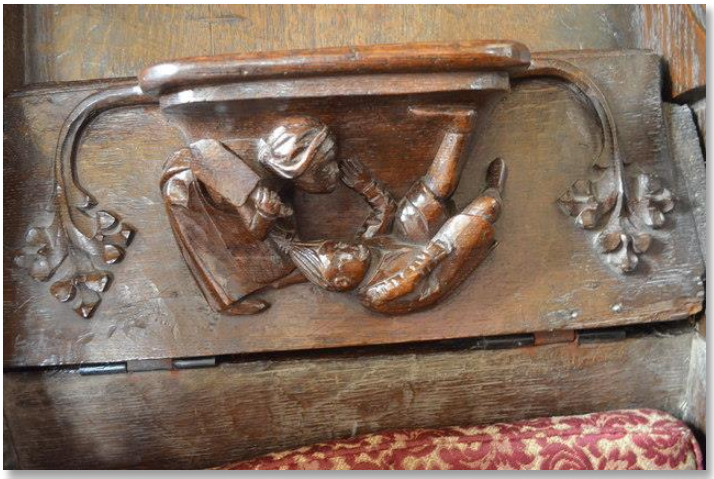

HOW AND WHY PARTNER VIOLENCE IS NORMAL FEMALE BEHAVIOUR BUT ABERRATIONAL MALE BEHAVIOUR

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ABSTRACT

That intimate partner violence (IPV) essentially is female-perpetrated is explained bottom-up from the biological principle that the female is the limiting factor in reproduction, through genetic and neuro-hormonal levels. Female-specific aetiology stems from greater female need for pair-bonding, spurring greater mate-retention behaviours to assuage attachment anxiety, and avoiding implantation failure by restricting (channelling) partner sexual attention in evolved cyclical hostility (PMS). IPV is violence in which females specialise: uninhibited preferred physical aggression modes in couple context. Unless part of minority mental-pathological general violence, males are self-inhibited. The reality of IPV, captured holistically at its inception in dyadic study of adolescents & young adults, shows much greater female perpetration, initiation and escalation, uni- and bilaterally; males usually non-responsive or mildly reciprocating.

Keywords: (intimate) partner violence, female-perpetrated, anxious attachment, avoidant attachment, PMS

THE COMPLETE INADEQUACY OF CURRENT IPV THEORY

Current theory of intimate partner violence (IPV) according to all new review is wholly inadequate; at best a contribution to a partial understanding of the topic (Ali, McGarry & Bradbury-Jones, 2020; Chester & DeWall, 2018; Rothman, 2018); likewise typologies (Ali & McGarry, 2020). Burelomova, Gulina & Tikhomandritskaya (2018) take issue with conceptual frameworks and even basic definitions, echoing others that: "… existing theories are limited in their ability to explain contradictory findings or the heterogeneity of the IPV phenomenon … their empirical viability is yet to be determined". Even what should be central to study of a *partner* phenomenon, a thoroughgoing dyadic perspective, has been lacking. It's complained of by several research teams: Lantagne & Furman (2019) in their paper, *More than the sum of two partners*; Dokkedahl & Elklit in their 2019 review, *Understanding the mutual partner dynamic in IPV*; and (specially regarding adolescents) by Capaldi, Shortt, Tiberio & Low (2018). It looks symptomatic of hitherto an eschewal of methodology yielding undesired findings, to seek data to fit a rigidly held model instead of scientific testing. However, there *are* some recent dyadic studies proper, that bolstered by brand new ones address the deficiency. All show far greater *female* perpetration, in whatever pattern, and are reviewed below (after new original theory is outlined, to show its fit).

There is little or no fit of data with current IPV theory. An overall finding of greater *female* than male IPV perpetration has been comprehensively evidenced for several decades, as confirmed for example and notably in the exhaustive literature reviews across all sample types by Desmarais Reeves, Nicholls, Telford & Fiebert, (2012), of worldwide and even clinical samples (Esquivel-Santoven˜a, Lambert & Hamel, 2013), and, ironically, in data from the USA National Violence Against Women Survey (Tjaden & Thoennes, 2000). The findings here render untenable the feminist perspective of a main or exclusive focus on *the male batterer*. The now longstanding IPV paradigm among scientific aggression researchers, *gender symmetry*, is dubbed thus to contrast with the feminist notion, characterised *gender asymmetry*. A succinct distinction, certainly. However, it prises sex-differential data -- greater female perpetration and male victimhood -- into a *non-gendered* category of supposed zero skew by sex. This funnels consideration of IPV in whichever direction to be intra-couple dynamics as if males and females are interchangeable parties. So it is that the general conclusion is often understated as that women are perpetrators merely *at least as much* as are men, akin to the expression *as good as*

any coyly denoting *the best*. A forlorn attempt to not worsen the divide in the research community with feminist researcher-activists? Or to avoid censure from the feminist hegemony across academia? Whatever the reason, the *gender symmetry* tag is profoundly misleading.

The reverse *a*symmetry, as it were, may well be very great indeed, considering order-of-magnitude-plus disparity between anticipated and actual sex-differential IPV injury rates. Far greater male upper-body strength and weaker female body-frame together would yield a twenty-fold preponderance of female injury (as calculated by forensic psychologist Linda Dixon; personal communication), even assuming no excess male over female perpetration. Yet actual IPV injuries show a small or zero sex differential overall, a (much) greater male serious injury rate, and (after multiple corrections) likely a large majority of male spousal murder victims (see Moxon, 2014, pp. 26–27 for a discussion and citations). Even the partners of males in IPV therapy admit inflicting greater injury (Bélanger et al., 2015), as Cook (1997) found from analysing a US National Family Violence Survey. The disparity may be still greater given specifically male IPV injury will be missed in hospital and police protocols of enquiring about injuries not being applied as either policy or in practice as for women.

DATA QUALITY IS LOW BECAUSE MALES UNDER-REPORT THEIR VICTIMHOOD

Particularly in the absence of proper dyadic study to fully cross-check, there will be a major confound in most data of male (relative to female) under-reporting of victimhood. Deriving from the male imperative to maintain status (the overall outcome of male intra-sexual competition indicating genetic quality, which is male mate value, determining access to sex), males individually are silent regarding any weakness, especially of sustaining violence -- the ultimate indication of low status. There is evidence in all contexts, whenever investigated, of male failure in reporting victimhood and in help-seeking (for a mini-review, see Moxon, 2019, p25). This would be expected particularly for violence sustained from those with whom males never contest rank: females. (Contest inter-sexually for such as job promotion is de facto rank rivalry, but biologically meaningless, and experienced likewise). Even anonymous survey designed to exclude the *demand characteristics* known to evoke male under-reporting, nevertheless still results in male under-reporting (Archer , 1999). It's a deep-seated phenomenon. The sex differential in reporting IPV victimhood yet further widens as a result of female vulnerability being sexually attractive (Goetz, Easton, Lewis & Buss, 2012; Rainville & Gallagher,

1990). 'Damsel in distress' proceptive behaviour generally or selectively to draw male attention by evoking natural male protectiveness (see below) likely drives female *over*-reporting. Yet rarely in the literature is this mentioned even as a possibility, and neither is false reporting of victimhood, despite being a well-attested extremely common cover for and form of female perpetration, or the typical mischaracterisation of male attempt to restrain female IPV. A sex differential in reporting victimhood produced by male relative under-reporting in researched estimate of tenfold (Stets & Straus, 1990), or even, conservatively, only threefold (ONS, 2014), if taken into account would transform any raw data not showing greater female perpetration. Understanding of IPV would revert to the *status quo ante*, as depicted in the until very recently highly popular English *saucy* seaside postcards of angry wives wielding heavy household objects chasing their husbands, and not dissimilar imaging in medieval English church misericords (back-rests for choristers; a photograph of one of many examples on the theme of husband-beating by wives is the graphic at the head of this paper).

BUILDING THEORY BOTTOM-UP FROM BIOLOGY: AVOIDING FEMALE INJURY

Any theoretical consideration of IPV has to begin with the imperative of avoiding injury to female sexual partners, stemming from the biological principle that the female is the limiting factor in reproduction. All females can function to convey to the next generation genes of chosen males, who are but a subset of all males: only those of sufficiently high genetic-quality (the male functioning in reproduction as the *genetic filter*: Moxon, 2016), leaving all other males surplus. Whereas a single (alpha) male potentially may suffice, females are never in surplus in that their maximum individual total reproductive output is necessarily low. Avoiding physical damage potentially compromising reproduction of any and every female therefore must be not only important to their male partners but a feature foundational to social system, expected to have produced profound adaptation.

Evident from very earliest ages is the human seemingly implicit cognition in an *unspoken rule* that the male must protect the female (Euverman, 2009), paralleled in chimpanzee males' protectiveness towards females: readily risking their own lives to defend them (Sagan & Druyan, 1993) as do human males. Boys and girls play games about boys *protecting* girls (Best, 1983; Kinney, 1999). Boys as young as four frequently say boys protect girls (Kagan, 2001). In mixed adult focus groups discussing violence, "the single most frequent (> 30%) type of comment

involved men's protecting women. In contrast, women were never discussed as protectors of men" (Hollander, 2001, p 92). An evolved origin appears well-evidenced.

Ubiquitous profound male protectiveness explains ready misperception of IPV as only male-perpetrated. In thus rendering male IPV unusual, it's seen to be aberrant and unjustifiable. The opprobrium this evokes prompts over-anticipation in error-management mode (false positives being an acceptable cost given the importance of preventing the behaviour). Uncommon behaviour comes to be imagined instead as default and requiring special efforts to thwart. Formerly, *folk wisdom* that men hold back (whereas women may let fly) would correct such truth inversion, but currently hegemonic feminist ideology instead compounds the evolved cognitive bias. The corollary of hyper-visible male perpetration and female victimhood is rendering *hypo*-visible -- effectively *in*visible -- female perpetration and male victimhood. So it is that there is both more concern for female victims and greater denigration of male perpetrators (Hammock, Richardson & Lamm, 2017), and only when victims are female do adolescent bystanders intervene in dating violence (Debnam & Mauer, 2019). Both boys and girls view girls' dating aggression as less serious and much the more acceptable (even controlling for level of aggression) (Ramsey, 2017), and justifiable (O'Keefe, 1997). Physical violence towards males is well tolerated (Mumford, Taylor & Giordano, 2020). Almost all (96%) women expect no disapproval for striking a partner (Bartholomew, Schmitt, Yang & Regan, 2013). Many studies old and new show males are viewed as culpable, irrespective of circumstances, even when exclusively the victims.

Male-specific self-inhibition preventing physical aggression towards women was first demonstrated by Felson, Ackerman & Yeon (2003), and then in an important series of vignette experiments (Cross, Tee & Campbell, 2011; Cross & Campbell, 2012), revealing the effect is not just within-couple but in *any context where the target would be female*. In a hypothetical provocation scenario, men have a threefold lesser propensity to strike a partner than do women (Bartholomew et al., 2013). Male self-inhibition extends to hesitating to reciprocate women's hostile actions (Szell & Thurner, 2013), commonly so strongly as to be *self-silencing* (Driscoll, 2011), even in the case of otherwise particularly aggressive men (Felson, Savolainan, Hughes & Ellonen, 2015).

NEURAL, HORMONAL AND GENETIC BASES OF MALE NON-AGGRESSION TO FEMALES

With an adaptation to avoid injuring females being well-evidenced, we should expect phylogenetically ancient highly-conserved male-specific profound neural, hormonal and genetic mechanism. Just such has been sought and found in *primitive* species: a double-layered inhibitory switch activating mutually exclusive aggression- and courtship-triggering neural clusters (Koganezawa, Kimura & Yamamoto, 2016). This would ensure males encountering females engage in courtship terms, not in dominance-submission mode (as if encountering another male), obviating risk of displacement from male-male aggression. Violence *from* a female would be experienced as seemingly highly incongruous male-type intra-sexual behaviour, evoking evolved deference (so much so in some species, like ring-tailed lemurs, as formerly to have been mistaken for female dominance). This is congruent with the discovery through experimental gene (TRP2) manipulation of likely the same or related mechanism: a sexing algorithm, whereby an encountered individual is first sexed and if opposite-sex engaged with sexually, or, if same-sex, then engaged in dominance-submission terms (Kimchi, Xu & Dulac, 2009; Stowers et al., 2002).

What specifically prompts male self-inhibition is close physical contact with a female, which triggers a male-specific three-tier neural pathway serving to nearly eliminate aggression towards females (Yuan, Song & Yuan., 2014). As this does not make use of other learning-memory circuitry, it's clearly a dedicated mechanism for this function. The genetic underpinning of this or the aforesaid mechanisms (that are surely inter-related) is down-regulation of the doublesex (dsx) gene, causing reduced aggression by males towards females -- yet elevated aggression towards other males (Beckers, Kijimoto & Moczek, 2017). Moving instead up a mechanistic level to the hormonal, and specifically in humans, oxytocin, the hormone associated with pair-bonding, reduces reactive aggression in men -- but not in women -- by lowering their sensitivity to provocation (Zhu et al., 2019); congruent with men needing much more provocation to perpetrate IPV than do women (Felson et al., 2015).

NEURAL, HORMONAL AND GENETIC BASES OF FEMALE RAISED AGGRESSION TO MALES

The experimental work of Cross, Tee & Campbell (2011) and Cross & Campbell (2012) further and even more interestingly revealed that females not only are *un*inhibited in cross-sex aggression, but *actively prefer physical modes of aggression specifically in a couple context*. The

neuro-hormonal and genetic underpinning of this too has been found. The above-cited Beckers, Kijimoto & Moczek (2017) additionally find the doublesex gene has sex-dichotomous functionality in conversely producing *increased* aggression by females towards males (leaving their aggressiveness towards other females unaffected), all with no collateral impact on courtship or mating. The fine-scale neural mechanism for this appears to be in one mode of expression of the doublesex gene in activating a small subset of neurons with no equivalent in the male, that incites high amounts of aggression (Charles, 2019). This same or related circuity has been found independently by Palavicino-Maggio, Chan, McKeller & Kravitz, (2019). Again moving up another mechanistic level to oxytocin, females are prompted to aggress against sexual partners (whereas males are prompted to aggress towards male strangers) (DeWall et al., 2014). In a primate model, both oxytocin and vasopressin have robustly very different effects according to sex, most notably driving female threatening behaviors towards males yet affiliative behaviour to other females (Jiang & Platt, 2018).

A FEMALE SPECIALISATION AND A SUBSET OF MALE ABERRATIONAL GENERAL VIOLENCE

An evolved male-specific profound mechanism inhibiting male-to-female physical aggression is not at all inconsistent with minority male IPV. Adaptations for various reasons may not be universally exhibited, and in requiring no more than a statistical advantage to become fixed may have in-built incomplete efficacy. Given the profundity of the adaptation here, a failure of male inhibition is unlikely to be caused by counter motivation but instead dysfunction owing to a mental health issue. The latter hardly would specifically compromise inhibition of aggressing against females, instead effecting disinhibition generically. Male IPV thereby would be a subset of an individual male's unusual general violence and offending. Women's violence conversely would be expected to be normal but couple-confined.

The criminal data supports this sex dichotomy. Women IPV perpetrators specialise (the term used in the literature) in that form of offending, whereas their male counterparts are generalists (Wolbers & Ackerman, 2020; Bouffard & Zedaker, 2016; Bouffard, Wright, Muftić & Bouffard, 2008; and Feder & Henning, 2005). Thornton, Graham-Kevan & Archer (2016) conclude: "Men perpetrated higher levels of general violence and non-violent offenses than women, whereas women perpetrated significantly more IPV than men". A history of general

physical fighting predicts IPV for men but not for women (Riggs, O'Leary & Breslin, 1990). Comparing male within-couple-only and extra-couple-only violent offenders, there are no statistical differences in their characteristics (Juarros-Basterretxea et al., 2018). A study by Theobald, Farrington, Coid & Piquero (2016) comparing males convicted of violence both outside and inside the home, or either only outside or only inside the home, shows males belonging to all three categories are similarly aberrant.

FEMALE IPV STEMS FROM FEARING PARTNER DEFECTION, MALE FROM MENTAL DISORDER

Men in all the categories exhibited marked psychopathology (mental, particularly anti-social disorder, conceived from a behavioural perspective). Feder & Henning (2005) find much greater anti-social behaviour by male compared to female partner-violent arrestees. A unique predictor of male IPV perpetration is psychopathy (Kiire, 2017). More specifically, the unique predictor may be primary (factor one) psychopathy (Bates, Archer & Graham-Kevan, 2017), or factor one especially and additionally secondary (factor two) psychopathy (Mager, Bresin & Verona, 2014). Alternatively conceiving mental disorder in personality terms, meta-analysis reveals male IPV is due to anti-social personality disorder (PD) (Spencer et al., 2019). Yu et al. (2019) find all forms of mental disorder, notably PD, together account for up to an eight-fold greater risk of male IPV perpetration, especially as manifest in or co-morbid with substance abuse. This is as for male criminals generally: PD is heavily over-represented in the male prison population (Howard, 2016). Note that with the full range of psychiatric disorder being under consideration in Yu et al.'s study (including autism, which shows no association), the correlation with IPV would be much larger still if the range were narrowed. So it is that Thornton, Graham-Kevan & Archer (2010) find that specifically Cluster A PD (paranoid, schizoid, schizotypal) traits predict male IPV; Cluster B (emotionality, essentially), female. The authors claim "this provides some support for the view that men's IPV has different causes from women's, and possibly the function of the violence is different for the two sexes" (p 7). Thornton (2012) points out "A is the cluster that is closest to mental illness. It is possible that men need to be more disordered than women before they perpetrate IPV" (p 214). By contrast, "it appears as though women's IPV may have an element of instrumentality. Previous research has found that instrumental beliefs are related to women's IPV (e.g. Archer & Graham-Kevan, 2003; Archer & Haigh, 1999; Moffitt et al., 2000)" (p 256). Thornton concludes that whereas male IPV is due to psychopathy, that by

females is through anger and the male partner's attachment avoidance. This has been more recently formulated by Thornton with Graham-Kevan & Archer, (2016), likewise Guay, Sader, Boisvert & Beaudry, (2016), as being for males a lack of self-control, and, for females, anger. IPV for males seems to be aberrant disinhibition; for females, IPV appears to be aggression given a normal free reign.

Researchers attribute the endogenous basis of female anger driving IPV to female concern for the possibility of partner defection, indicated by different but interchangeable terms: *relationship anxiety* ("not being able to reinforce levels of positivity") (Ha, Kim & McGill, 2019), *anxious attachment* (Magelky, 2013), *fearful attachment* (Bonneville, 2016), or *inter-personal dependency* (Sharifi et al., 2018). Thornton dubbed it *fear of abandonment*, as a characterisation of cluster B PD traits, evoked by more normal expression of cluster A PD traits in the male as simply attachment avoidance -- a preference for solitude and a dislike of close relationships. This spiral, dubbed the female's *insecure attachment*, produces great relationship distress (Muetzelfeld, Megale & Friedlander, 2020), mutually escalating female anger and IPV (Rodriguez, 2000), with only male IPV victimhood (Karakurt, Keiley & Posada, 2013), or mainly male, even for males themselves in treatment for IPV perpetration (Bélanger et al., 2015).

A pattern develops where the female makes some demand to test the male, who declines to respond, instead disengaging and becoming avoidant (Eldridge et al., 2007; Chistensen et al., 2006, following earlier work by several others). *Demand-withdrawal* is a couple dynamic long known to be female-initiated. Christensen et al. confirm its cross-cultural reality, and that "evidence suggested women wanted greater closeness versus independence in their relationships than did men. Differences between partners in desire for closeness versus independence were associated with greater demand/withdraw communication". Eldredge et al. show this is the basis of relationship distress, or, as Schrodt, Witt & Shimkowski (2014) and Christensen put it, reduced relationship satisfaction. Accordingly, it is women who start and escalate relationship conflict, want more than men *to put the partner in their place*, and are less motivated to avoid confrontation (Winstok & Smadar-Dror, 2018).

Overall, male IPV seems not due to something pertaining to typical men, being mental disorder; and therefore, is exhibited by a male small minority only. Telling specific deficits of male IPV offenders include unusual difficulty recognising fear in female faces, mistaking them as

happy (Seinfeld, Arroyo-Palacios & Iruretagoyena, 2018). By contrast, the particular origin of female IPV as normal behaviour is apparent, motivated by the need to retain the partner. Women's especial fear of a threat to the integrity of the pair-bond is revealed by their far more complex neural correlates to cues of relationship conflict (Flanagan et al., 2019).

WOMEN'S GREATER MATE-RETENTION BEHAVIORS

That partner retention is more a female than a male imperative is apparent from mate-retention tactics being mainly either female-specific and/or used mostly by women: vigilance, concealment of mate, monopolisation of time, jealousy induction, punishing threatened infidelity, emotional manipulation, love & care, derogation of competitors, verbal possession signals, derogation of mate, and appearance enhancement (Buss & Shackelford, 1997). Men instead employ resource display, possessive ornamentation (giving such as rings), commitment manipulation (eg, proposing marriage), submission, and self-debasement (giving in all the time) and -- to other men envisaged as rivals, *not* to partners -- threats and sometimes violence. The male forms conspicuously are rather more indirect. The findings replicate and build on those of Buss (1988), and accord with Kardum, Hudek-Knežević & Gračanin's (2016), who stress direct guarding, manipulation, negative inducements and public possession signalling as particularly female ploys. Findings are robust in extending beyond face-to-face to on-line contact (Lopes et al., 2017). Male tactics tackle (potential) rivals rather than the partner, so IPV requires displacement, which would be de facto rather than IPV per se.

WOMEN'S SPECIAL NEED FOR PAIR-BONDING AS AN ULTIMATE ROOT OF FEMALE IPV

The greater range, number and use of female mate-retention behaviours accords with the pair-bond context necessarily being central to the aetiology of female-predominant IPV. Human pair-bonding evolved not to serve male paternity confidence but to maximise female fertility. This is achieved in effect by projecting forward in time female peak fertility through offspring being repeatedly sired by the same high-genetic-quality male acquired when the female is at her attractive peak, together with the presence of the male partner denying social/sexual access by low mate-value males (thereby allowing, even facilitating extra-pair sex with males still higher in mate-value than the partner) (Moxon, 2013). Males benefit in acquiring more fertile females than could be obtained promiscuously, but given variation in female fertility is much less than that in male gene quality, it's a far weaker fertility enhancement than for the female. Consequently,

women value the pair-bond far more than do men. Hence the extraordinary lengths traditionally women go to acquire a high mate-value pair-bond partner in vying with each other to honestly signal future fidelity, by face-body veiling or FGM (Moxon, 2017); also the intense focus women have on their pair-bond in their everyday communications, revealed in major sex differences in phone usage patterns (Palchykov et al., 2012), and in women's far greater worry about infidelity (Shattuck et al., 2012), notwithstanding the male being the only partner at risk of raising another's offspring. (For further citations and discussion, see Moxon, 2013, p8.)

FURTHER AETIOLOGY IN DISSUADING SEX: HORMONAL PARTNER-DIRECTED HOSTILITY IN PMS

Further female IPV aetiology is surely apparent in premenstrual syndrome, with PMS being partner-directed hostility: irritability, moodiness and temporary relationship dissatisfaction (Fehlner, 2018), expressed by a large or overwhelming majority of women (many studies), and often used in mitigation of violent crime. That symptoms follow shortly after the female fertile window, and are partner-directed, is hitherto unexplained. Ziomkiewicz-Wichar (2017) reviewed but found wanting all hypotheses of PMS function. Reiber's (2009) claim that it is the relative low mood in the shadow of hormonal mood uplift would explain neutral but hardly the evident highly negative mood; and Gillings' (2014), that it serves to dissolve "infertile" pair-bonds, fails to account for the timing of negative mood within the cycle. There *is* abrupt decline in sexual intercourse after the fertile window (Wilcox et al., 2004), but its basis is that sex would severely disrupt implantation of any fertilised egg (Steiner, Pritchard, Young & Herring., 2014; in line with old work by others). Dissuading the male partner from initiating counter-productive sex would provide an important evolved function for PMS, and Gillings' evidence can be marshalled in support of this hypothesis. This is the first presentation of an implantation-failure avoidance hypothesis of PMS.

The hormonal basis of PMS would be expected to involve estradiol, given its fluctuating levels through the female cycle peak during the luteal (non-fertile) phase, coinciding with PMS; also that levels directly relate to symptom severity (Seippel & Bäckström, 1998), and are negatively associated with women's relationship evaluation and sexual desire towards their partners (Righetti et al., 2020). PMS may be the extreme of a spectrum of less obvious behaviour, in that estradiol levels rise not just through the luteal but also the follicular phase, falling only at

ovulation -- also rising steadily after pregnancy until term. It's generally thought estradiol lowers serotonin, creating the irritability and anger keeping partners at bay when sex would not (or is less likely to) lead to conception, or sex would be damaging. Estradiol is high or rising at all times other than at ovulation (when sex *would* lead to conception) and menstruation (which itself deters both parties from sex). The consequent hostility through much of the female cycle to dissuade sex, though seemingly an opposite motivation to partner retention, is likewise grounded in the ultimate goal of increasing female fertility. The female needs *both* to keep the partner pair-bonded *and* to channel his sexual attentions away from when it might be damaging (or useless) and into the fertile window. Conflict between these motivations may yet further drive female IPV. (Note that mixed data about estradiol and aggression is re *trait* aggression (general predilection to aggression), not specifically aggression in a pair-bond context.)

A FIT WITH THE NEW THEORY: DYADIC STUDY OF YOUNG COUPLES REVEALS THE REALITY OF IPV

To see the fit with data of the new original theory herein outlined, a review follows of new and recent thoroughgoing dyadic studies, which usefully entail cross-checking data in holistic, dynamic overview, exposing the direction, initiation, non-reciprocation and skew in mutuality of IPV. The new theory would predict far greater, even overwhelmingly greater female vis-a-vis male IPV perpetration, both unilaterally and in skewed bilateral IPV. However, notwithstanding better methodology, confounding with male victimhood under-reporting bias surely persists, and likely also a degree of anti-male discriminatory recording bias, together masking data to leave apparent substantially greater female perpetration rather than overwhelmingly so; but the latter is what would be indicated.

Most recently, Hines, Straus & Douglas (2020), in their paper, *Using dyadic concordance types to understand frequency of intimate partner violence*, find "for physical IPV, severe psychological IPV, and controlling behaviors, bidirectional IPV was the most common, followed by female-only perpetration. Within bidirectionally aggressive relationships, women committed significantly more physical IPV and controlling behavior". With a marked imbalance of perpetration in bidirectional couples, overall the pattern would appear to be essentially female-unilateral, albeit in some couples the male responds to a lesser degree in kind. Similar emerged investigating young married couples (Leonard et al., 2014), even though this was not

hypothesised. After first finding that *wife-only* violent couples were five times as prevalent as their *husband-only* counterparts, further (cluster) analysis revealed not only that supposed *both-aggressive* couples feature predominantly female violence, but a wholly unexpected type emerged: "… a cluster with a very high frequency of aggression in which the woman engages in substantially more aggression than the man is of considerable interest. This finding is consistent with a number of studies (e.g. Robertson & Murachver, 2007; Whitaker et al., 2007; Williams & Frieze, 2005). Similar to these other studies, this cluster was more prevalent than the cluster of high frequency aggression in which the man engages in more aggression" (Leonard et al., 2014).

Reviewing a decade ago the then limited number of thoroughgoing dyadic studies, Bartholomew & Cobb (2011) came to three inter-related conclusions: "Women are more likely than men: (a) to initiate violence in heterosexual relationships (eg, Archer, 2000; Ferguson et al., 2005), (b) to report that they would be violent in response to unacceptable partner behavior (eg, Winstok, 2006a), and (c) to perpetrate IPV when only one partner is violent (eg, Whitaker, 2007)" (Batholomew & Cobb, 2011). Strong evidence of female unilaterality comes from a review by Langhinrichsen-Rohling, Misra, Selwyn & Rohling (2012) of all post-1990 studies investigating bi- and unidirectionality in adolescents and young adults. Of the roughly half of IPV that was unidirectional, twice as many couples were female-only, and this was the case across four out of the five sample types they reviewed: all bar those from police reports (which obviously would be very heavily biased by male under-reporting of victimhood).

Dyadic investigation of adolescents and young adults should be particularly instructive, as IPV when initially emerging likely is in least-complicated form. Combining an holistic view and earliest manifestation is important in establishing aetiology. Most recently, Reyes, Foshee, Chen & Ennett (2019) find 12% of girls are perpetrators but only 5% of boys, with a male sub-group exclusively victimised (not returning aggression); the authors citing Goncy et al., (2016) as discovering the same pattern. Johnson, Giordano, Manning & Longmore (2015) found that the *perpetrator-only* group is overwhelmingly female (90%), with, again, a twofold sex differential overall in perpetration; for 21-24-year-olds, 29% female, 15% male. A study of late adolescents by Testa, Hoffman & Leonard (2010) showed just 1% of couples featured male-only violence, as against 14% female-only; and of the 20% mutually violent, 69% were predominantly female-

violent, with a mere 7% mostly male. The authors note this is consistent with studies over the previous decade. For example, O'Leary & Slep (2003) found just 8% of boys but 15% of girls engaged in physical violence, and girls were considerably more likely than boys to persist with it. Another though rare study mode here is simply to observe interactions; the first ever being of adolescents (Capaldi & Crosby, 1997): 6% of males and 16% of females perpetrated physical IPV considered by the coders to be not playful; in only 4% of couples was it male-only, whereas in 17% it was female-only. A particular use of observation studies is establishing who initiates, as was the focus of Capaldi, Kim & Shortt (2007) in finding 18-24-year-old females three to four times more likely to initiate than males.

Specifically regarding adolescents, an at least twofold overall sex differential of excess female over male perpetration is a very robust conclusion. Meta-analytic review by Wincentak, Connolly & Card (2017) showed overall prevalence rates for perpetration of 13% for boys and, for girls, 25%. A similar twofold sex differential, likewise looking at adolescents, is found by Taquette & Monteiro (2016), Calvete, Orue, Gamez-Guadix & López de Arroyabe (2016) and Taylor & Mumford (2016). That this is not culture-specific is shown, for example, by a study of Latino youth by Reyes, Foshee, Chen & Ennett (2017): 22% of boys reported victimhood as against only 9% of girls, whereas perpetration was reported by 17% of girls and a mere 2% of boys -- sex differentials of twofold-plus and eightfold-plus respectively. Examination of teenage couples over a decade revealed no change in the considerably higher rates of victimisation of boys over that of girls (Shaffer et al., 2018). The pattern is also confirmed in a study using multiple focus groups: "both males and females explained that dating violence is more often perpetrated by females" (Taylor, Calkins, Xia & Dalla, 2017). Self-report by adolescent females of greater perpetration than males was previously found by Foshee et al. (2009) and La Greca & Harrison (2005).

Perhaps the most comprehensive dyadic research on adolescent couples is by Burk & Seiffge-Krenke (2015) and Seiffge-Krenke & Burk (2015). The breakdown of their dyad types is instructive. The most common (20%), *physical female*, are of unilaterally violent females receiving little if any male aggressive response. Next most numerous is the *aggressive female* type (18%), where females are both psychologically and physically aggressive. Only third in prevalence is the corresponding *aggressive male* type (14%). Mutually aggressive couples are a mere 6%, with the remainder (42%) being non-aggressive. The preponderance here of unilaterally and

more-or-less unilaterally violent females over males is almost threefold, with more than half of females being violent. Most tellingly, Burk & Seiffge-Krenke conclude: "In *all of the dyads with aggressive females, irrespective of whether* they were both psychologically and physically *aggressive* or only psychologically *aggressive*, male partners did not respond with *aggression.* This points to gender-specific functions and interpretations of aggression." Seiffge-Krenke & Burk (2015) elaborate:

> *A large proportion in our sample consisted of dyads with one-sided aggressive profiles in which females were more aggressive than their male partners. The lack of aggressive responses of their male partners suggests a gender-specific pattern in the evaluation and application of aggression as a way of resolving relationship conflicts. … Male self-silencing as a pattern of dealing with female aggression has been consistently found among married and cohabiting adult couples (Page, Stevens & Galvin, 1996), and according to our findings, seems to have an early onset*.

The data across these studies is consistent in showing substantially greater female IPV perpetration in whatever pattern, congruent with the new original theory here outlined, providing independent support.

CONCLUSION

A comprehensive *bottom-up* multi-level new theory of IPV is available to address the failure of current theory to fit the data. From fundamental biological principle through genetic, neural and hormonal mechanisms underpinning greater female mate-retention behaviour to assuage attachment anxiety, it is shown that female special reliance on pair-bonding is the basis of understanding IPV. The strength and number of lines of evidence point not just to the predominance of female perpetration but its distinct functionality and aetiology, none of which applies to male IPV. In having no apparent function, being the result of *dys*function, and more by displacement than targetting, male perpetration is better considered the aberrational minority *de facto* counterpart to female perpetration of IPV *per se*.

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AUTHOR PROFILE

Steve Moxon is an English independent (non-affiliated) cross-disciplinary researcher/writer of science review papers and books outlining original theory on the biological roots of human sociality, behaviour and psychology, with a special interest in the sexes—sex-difference/dichotomy. Regularly journal-published for the past decade, his topics include dominance hierarchy (and associated reproductive suppression), pair-bonding, partner violence, competitiveness, stress response mechanism, the origin of the sexual divide, and why culture is biology. Throughout is a necessary bottom-up approach, excluding all ideology: an avowed stance against 'PC' ('identity politics'), specially its core of feminism; all being non-, indeed anti-science. Steve also researches/writes about mythologies (ancient and contemporary), these being another window on understanding humanity; and is a songwriter, singer & guitarist. He resides in the Pennine hills north of Sheffield, Yorkshire, where he grew up, feels at home, and can walk or cycle through the stunning countryside of steep-sided wooded valleys and gritstone edges.

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