THE EFFECTS OF PATERNAL DISENGAGEMENT ON WOMEN'S SELF-PERCEIVED MATE VALUE

by

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ABSTRACT

Previous research has highlighted the link between low-quality paternal investment and risky sexual activities, permissive sexual attitudes, and disinterest in long-term relationships amongst daughters. However, the specific effects of paternal disengagement on daughters' self-perceived mate value (an instrumental variable in mating decisions and relationship outcomes) remain unexplored. Here, I aim to address this research gap by examining whether cues of paternal disengagement (vs. paternal engagement) would prompt women to report lower self-perceived mate value. Results from 101 female college students who participated in a Zoom study revealed no significant effect of paternal disengagement on women's self-perceived mate value. Results were trending where women primed with reminders of paternal disengagement reported slightly higher mate value scores than women from the paternal engagement condition. Additional exploratory analyses revealed that women in the paternal disengagement condition reported less father involvement, which, in turn, was associated with more permissive sexual attitudes and greater perceived vulnerability to both emotional isolation and financial threats. Overall, these findings suggest that activating cues of paternal disengagement might shift women's perception of their father's investment as low-quality, resulting in more interest in unrestricted sexual commitment and more interest in seeking compensatory male investment for protection against isolation and financial threats.

Keywords: self-perceived mate value, paternal disengagement, paternal investment theory, women's sociosexuality

The Effects of Paternal Disengagement on Women's Self-Perceived Mate Value

Paternal Investment Theory (PIT) proposes that the quality of fathering could calibrate mating behaviors and relationship expectations in the offspring (Draper & Harpending, 1982). To this end, a substantial number of empirical studies have examined how father absence influences women's sociosexual outcomes and sexual strategies. Specifically, early observation of low paternal investment could engender higher frequencies of promiscuous and risky sexual activities amongst female offspring (Ellis et al., 2003; Ellis, 2004; Ellis et al., 2012). However, missing from the extant literature is the understanding of how father absence (i.e., paternal disengagement) during early childhood influences daughters' self-perceived mate value (SPMV), also known as self-perceived desirability to the opposite sex. Since mistakes in mating are costly, SPMV is a helpful tool for calibrating one's selection standards by preventing resources expenditure in pursuit of unattainable or low-valued mates (Regan, 1998). Furthermore, since SPMV is the best predictor of relationship satisfaction in Western cultures, a discrepancy in mate value between two partners can lead to long-term romantic dissatisfaction, affecting one's overall life satisfaction and mental well-being (Hromatko et al., 2015). My current research will redress the empirical gap in the literature regarding the mechanisms by which paternal disengagement influences SPMV in daughters. I seek to experimentally investigate such mechanisms by activating cues of paternal disengagement amongst participating women and subsequently evaluate the effects of such cues on their self-perceived desirability. Overall, the current study aims to understand whether father absence plays a critical role in changing daughters' SPMV, a process that could potentially alter women's mating decisions and relationship outcomes.

Paternal Investment and Its Effects on Daughters' Sexual Outcomes

As highlighted in the classic research paper by Draper & Harpending (1982), both father absence and presence throughout childhood played a critical role in shaping daughters' sexual and reproductive behaviors. More specifically, low paternal investment triggered various psychological responses that accelerated sexual activities and propensity toward short-term sexual commitment amongst daughters. These psychological changes included negativity toward male mating behaviors (e.g., believing that men are mostly interested in maximizing access to various female partners), perceiving male investment as unnecessary for reproductive purposes, and reduced interest in seeking long-term male investment in a committed relationship (Draper & Harpending, 1982). A substantial body of empirical work from recent decades provides further support to the above classic findings. For example, numerous studies discovered that women who experienced father absences during early adolescence (10-15 years) reported reaching menarche and engaging in their first sexual intercourse at a much younger age than women who grew up with two biological parents in the household (Alvergne et al., 2008; Ellis et al., 2007, Ellis et al., 2012). Low-quality father investment has also been associated with an increased number of sexual partners and increased frequency of high-risk sexual behaviors (i.e., sexual activities that increase the risk for STIs or pregnancy) amongst women (Coley et al., 2009; Ellis et al., 2012; James et al., 2012; Quinlan, 2003).

Additionally, past researchers have also extensively investigated the father-specific effects (vs. mother-specific) on women's sociosexual outcomes. For instance, Coley and colleagues (2009) discovered that youth in families with active fathers who were knowledgeable about their friends and activities were less likely to engage in risky sexual behaviors. Previous experimental findings also demonstrated that cues of father disengagement led women to perceive more mating and sexual intent in male confederates, more permissive sexual attitudes,

and more negativity toward condom use (linked to risky sexual behaviors) as compared to cues of mother disengagement (DelPriore & Hill, 2013; DelPriore et al., 2018). Taken altogether, Paternal Investment Theory and the empirical research on the effects of father absence suggest that the quality of father involvement during women's early adolescent years significantly impacts women's subsequent mating behaviors; thus, such an effect could alter women's overall relationships, sexual, and well-being outcomes.

The Role of Mate Value in Mating and Relationship Satisfaction

Despite extensive research on the link between father investment and daughters' sexual outcomes and strategies, the specific effects of father absence on daughters' self-perceived mate value (SPMV), or self-perceived desirability, remain unclear. According to Regan (1998), understanding one's own SPMV is key to establishing minimum mate selection standards in the complex mating world. Evolutionary-based frameworks in human mating argue that to secure reproductive success, both men and women must seek out potential mates that possess the most desirable qualities. However, discrepancies in desirability between mate seekers and their targets are inevitable. Therefore, individuals must accurately assess their worth to avoid wasting energy and time on unachievable mates and reduce the likelihood of squandering resources on undeserving mates. As such, SPMV is associated with minimum selection standards, such that higher SPMV correlates with more stringent selection criteria for potential mates (Regan, 1998).

Recent empirical findings have discovered a robust link between mate value discrepancies and relationship outcomes. Salkicevic and colleagues (2014) indicated that differences in mate values between two partners negatively correlated with relationship satisfaction, especially amongst women. However, the direction of the discrepancies – whether your partner was higher or lower in mate value – mattered. Hromatko and colleagues (2015)

discovered that both Croatian and Iranian women reported being more content with their relationships if their partners were higher in self-perceived mate values. Research by Conroy-Beam et al. (2016) revealed similar result patterns where individuals who mated with higher-valued mates (i.e., irreplaceable mates) were satisfied with their relationships. However, the same study revealed that individuals who mated with lower mate-valued partners became increasingly dissatisfied with their relationship, especially when their "actual" partners did not match their "ideal partners."

How might SPMV further our understanding of women's sexual and mating decision-making in the context of father absence? Previous research denoted that overall, low-quality investment from both parents during childhood was associated with lower mate value in adulthood for individuals from both sexes (Antfolk & Sjolund, 2018). However, additional research is necessary to investigate whether low-quality father investment is also associated with lower mate values in female offspring, specifically. Understanding this missing puzzle piece is instrumental as negative effects on women's mate value could lead to costly mating decisions, such as mating with partners of lower mate value, which could result in future relationship dissatisfaction (as discussed in the previous paragraph).

The Current Study

In the present study, we seek to redress the gap in research regarding the effects of father absence on women's SPMV. Based on PIT, I anticipate that father absence would influence women's SPMV, a key variable in women's mating and relationship outcomes. Based on previous findings suggesting that low parental investment was associated with lower mate values, I hypothesized that father absence would negatively impact women's SPMV. I used cues of paternal disengagement as a proxy for father absence and cues of paternal engagement as a

proxy for father presence. To this end, I experimentally primed female participants to remind themselves of their father absence (or presence) using the psychological manipulation that Dr. Hill developed in her past work (DelPriore & Hill, 2013; DelPriore et al., 2018). Following this priming procedure, participants answered various measures that assessed their mate values, their perceptions of their father involvement, as well as their sexual and social attitudes. Overall, I hypothesized that women primed with cues of paternal disengagement would report lower SPMV than women primed with cues of paternal engagement.

Methods

Participants

I recruited 107 female undergraduate students from the psychology subject pool (SONA) at Texas Christian University from February to May 2021. All participants received partial course credit for their participation. Of these 107 participants, 6 women (n = 4 in the paternal disengagement condition) were excluded from the final analysis due to failure to comply with instructions. For example, 4 women from the paternal disengagement condition wrote about how present their fathers were instead of describing events in which their fathers were absent. The final sample consisted of 101 participants (M_{age} = 20.18, SD = 1.93), with 48 women randomly assigned to the paternal disengagement condition. These women were predominantly White (80%) and exclusively heterosexual (80%). Most of them identified as coming from "wealthy" to "very wealthy" socioeconomic background (72%); the rest identified as coming from either "middle class" (22%) or "somewhat poor" (6%) socioeconomic status. About 75% of participants had parents who were still married and living together at the time of the study.

Procedure

Due to the COVID-19 pandemic in 2021, the current study took place over Zoom. Upon joining the Zoom meeting room at their signed-up times, a trained researcher greeted participants and subsequently provided them with the link to the study survey using the Zoom chat box. Although no recording was involved, participants must turn on their Zoom cameras. This practice allowed the researchers to promptly notice if participants engaged in any distracting behaviors (e.g., using cell phones while completing the study, talking to roommates or friends in the surrounding area). Once participants began the survey, the researcher would turn off their camera to prevent further distraction.

All instructions, experimental stimuli, and questionnaires were presented via Qualtrics web-based program (Qualtrics, 2021). Participants were told that they would complete the study that sought to explore how writing styles influenced social attitudes, and thus, the writing prompt was randomly generated by the computers. Following the cover story, participants were randomly assigned to either paternal disengagement or paternal engagement conditions. Participants in the paternal engagement condition were asked to recall a time when their birth fathers were absent for an important event in their lives. Specific instructions were as follows:

> “Take a few seconds to think back to a time in your life when your birth father was absent for an important event when you really needed him. "Birth father" can refer to either your biological father or an adoptive father who was present from infancy or birth. Try to relive the sights and sounds of this experience as much as possible. Please take a minute to vividly imagine this scenario and think about how it made you feel.”

After one minute, the following writing prompt appeared:

> "Now that you have taken some time to remember this moment, please spend the next three minutes writing about your experience. Describe in detail how your father's lack of support - or his physical or psychological absence - made you feel. Describe all features of the event in as much detail as possible, allowing your personal feelings to enter your description."

Participants from the paternal engagement condition received identical instructions, except that they were asked to recall a time when their fathers were psychologically or physically present for an important event in their lives. Following this writing task, participants completed various measures related to their self-perceived desirability and vulnerability, sexual behaviors, and relationships with their fathers.

Materials

Mate Value

I employed two measures to assess women's self-perceived mate value. First, I used the multi-dimensional measure of Mate Value Inventory (MVI) to assess women's self-perceived mate value across 17 traits (Kirsner et al., 2003). These traits were ambitious, attractive face, attractive body, desires children, emotionally stable, enthusiastic about sex, faithful to partner, financially secure, generous, good sense of humor, health, independent, intelligent, kind, loyal, responsible, and sociable. Recorded responses were on a scale of –3 (*extremely low on this trait*) to +3 (*extremely high on this trait*). Composite scores were computed by averaging the items (α = 0.80; M = 5.33*,* SD = 0.63*)*, with higher scores indicating greater mate value.

Second, I assessed women's overall perceptions of their desirability as a potential mate using the Mate Value Scale (MVS) developed by Edlund and Sagarin (2014). The 4-item

questionnaire queried responses on a 7-point Likert scale (e.g., “Overall, how would members of the opposite sex rate you as a potential partner”), with higher scores indicating higher self-perceived desirability (α = 0.90; M = 4.96, SD = 0.85*)*

Additional Measures

Unrestricted Sociosexuality

Participants responded to seven items that assessed individual propensity for engaging in sexual relationships without serious commitment and desirability for variety in sexual partners (Appendix 1). The scale was created based on similar measures previously used in other studies, such as the sociosexual orientation inventory (Simpson & Gangestad, 1991) and the Relationship Orientation Questionnaire (Schwarz et al., 2011). Examples of the items were “I find the idea of brief sexual encounters exciting” and “I would like to have a romantic relationship that lasts forever.” Participants indicated whether each statement was true of them on 9-point rating scales (α = 0.73.; M = 7.25, SD = 1.28*)*, with lower scores indicating greater unrestricted sexual attitudes.

Father Involvement

To evaluate women’s perceptions of their relationship with their fathers, I selected items from three subscales of the Fatherhood Scale, which consisted of Responsible Paternal Engagement, Positive Paternal Responsiveness, and Accessible Father (Dick, 2004). Participants were asked to think about their birth fathers (or adoptive/father figures) who were present during their first 16 years of life and rated their involvement levels (e.g., “My father taught me right from wrong”; anchors: 1 = *Never,* 5 = *Always*). Composite scores were computed to assess

overall perception father involvement, with higher scores reflecting greater father investment (α = 0.95; *M* = 4.09, *SD* = 1.10*)*.

Vulnerability to Isolation and Financial Threats

I adapted items from the Perceived Infectability subscale of the Perceived Vulnerability to Disease scale (Duncan et al., 2009) to create two subscales that assess women's perceived vulnerability to isolation and financial threats (Appendix 1). Participants rated their responses on a 5-point scale (anchors: 1 = *strongly disagree*, 5 = *strongly agree*). Higher scores on the isolation subscale indicated greater perceived vulnerability to loneliness and emotional isolation (*α* = 0.72; *M* = 2.40, *SD* = 0.73*)*. Likewise, higher scores on the financial threat subscale indicated greater perceived vulnerability to financial instability (*α* = 0.87; *M* = 1.84, *SD* = 0.82*)*.

Results

Effects on Mate Value

Prior to analyzing the main hypothesis results, I conducted assumption testing on both mate value measures. MVI results satisfied the Levene's Tests of Homogeneity of Variances based on mean, *F (*1, 99) = 0.17, *p* = 0.68. MVS composite scores also met the assumption for Levene's Tests based on mean, *F (*1, 99) = 0.55, *p* = 0.46

Between-subject differences in self-perceived mate values (as measured by the MVI and the MVS scale) were examined using analysis of variance (ANOVA). The results did not reveal significant differences in MVI scores between conditions, *F (*101, 1) = 1.42, *p* = 0.24, *η2* = 0.01. Although no significant differences existed, the results were treading in the direction such that women from the paternal disengagement condition reported higher MVI scores (*M* = 5.41*, SD* = 0.62*)* than women from the paternal engagement condition (*M* = 5.26*, SD* = 0.64*).* Similarly,

there were no significant differences in MVS scores between two conditions, F (101, 1) = 0.98, p = 0.33, $\eta 2$ = 0.01. However, MVS results were treading in the direction such that women from the paternal disengagement condition reported higher scores (M = 5.05, SD = 0.92) relative to women from the paternal engagement condition (M = 4.88, SD = 0.77). Overall, these findings suggested that there was no effect of the experimental prime on women's self-perceived mate values.

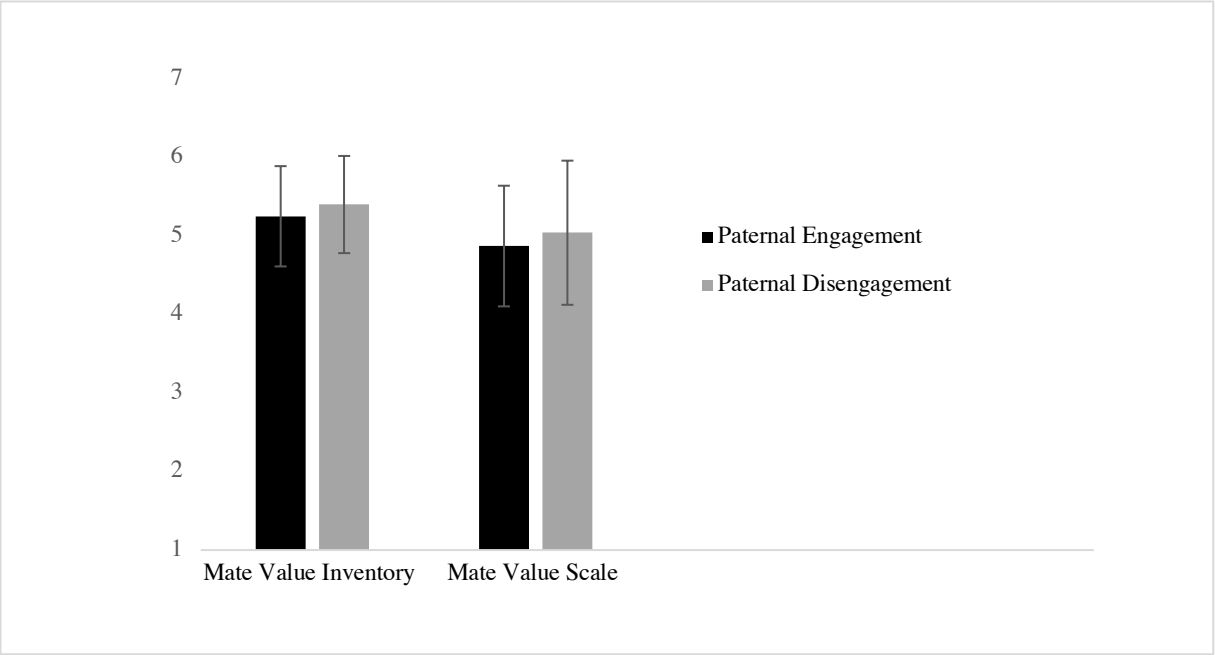

Figure 1. The effects of priming conditions (paternal engagement vs. paternal disengagement) on women's self-perceived mate values. Error bars reflect standard deviations.

Effects on Sexual Attitudes, Vulnerability to Financial and Isolation Threats (Exploratory Analyses)

Although the main hypothesis results were non-significant, I conducted additional exploratory analyses to examine whether activating cues of paternal disengagement (vs. engagement) influenced women's other behavioral and sexual attitude outcomes. Specifically, I sought to explore whether the experimental prime would alter women's perception of their

father, which was a potential mediating variable that might affect women's social attitudes. Prior to running exploratory analyses, priming conditions were dummy coded, with paternal engagement being the comparison condition (paternal engagement = 0).

The first Hayes (2018) bootstrapping procedure (SPSS Mediated Model using PROCESS macro-3.4) was used to examine whether father involvement mediated the relationship between the experimental prime (i.e., paternal engagement or disengagement) and women's restricted sexual attitudes. The results revealed a marginally significant association between paternal primes and women's perception of their father involvement, (*a* path), $b = -0.39$ ($SE = 0.22$), $t = -1.81$, $p = 0.07$. Specifically, women primed with paternal disengagement reported lower perceived father involvement as compared to women primed with paternal engagement. The results also demonstrated a significant positive relationship between father involvement and women's restricted sexual attitudes (b_1 path), $b = 0.35$ ($SE = 0.11$), $t = 3.03$, $p = 0.01$, such that higher perceived father investment was related to more interest in long-term relationship commitment. Conversely, lower perceived father involvement was associated with more interests in short-term relationships and variety in sexual partners. Analyses utilizing 5,000 bootstraps resamples were performed, and the 95% confidence interval for the indirect effect contained zero (-0.34, 0.77), and thus, non-significant.

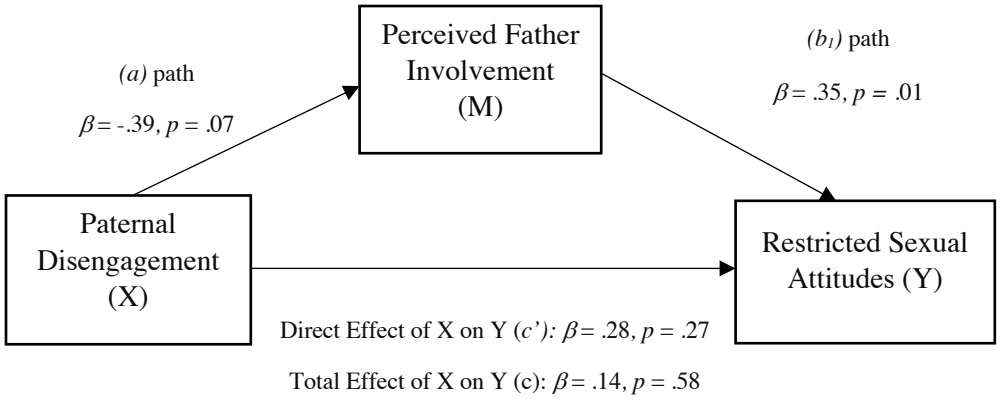

Figure 2. Mediating effect of perception of father involvement on cues of paternal disengagement and women's (un)restricted sexual attitudes.

The second Hayes (2018) bootstrapping procedure was used to analyze whether father involvement mediated the relationship between the prime and women's perceived vulnerability to loneliness (i.e., emotional isolation). Following the first Hayes model, the results revealed a marginally significant association between paternal primes and women's perception of their father involvement, (*a* path), $b = -0.39$ ($SE = 0.22$), $t = -1.81$, $p = 0.07$, such that women primed with paternal disengagement reported lower perceived father investment than women primed with paternal engagement. Furthermore, the results demonstrated a significant negative relationship between father involvement and women's vulnerability to isolation (b_2 path), $b = -0.23$, ($SE = 0.06$), $t = -3.68$, $p \leq 0.01$. Specifically, higher perceived father investment was related to significantly less perception of isolation threats, and vice versa. Analyses utilizing 5,000 bootstraps resamples were performed, and the 95% confidence interval for the indirect effect contained zero (-0.01, 0.24), and thus, non-significant.

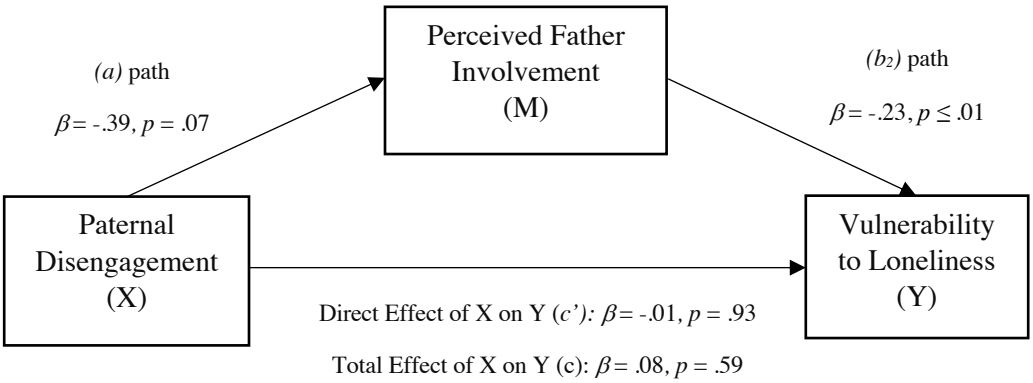

Figure 3. Mediating effect of perception of father involvement on cues of paternal disengagement and women's perceived vulnerability to loneliness.

The third Hayes (2018) bootstrapping procedure was used to explore whether father involvement mediated the relationship between the prime and women's perceived vulnerability to financial threats/instability. The model demonstrated a marginally significant association between paternal primes and women's perception of their father involvement, (*a* path), $b = -0.39$ ($SE = 0.22$), $t = -1.81$, $p = 0.07$, such that women primed with paternal disengagement reported lower father involvement relative to women primed with paternal engagement. The results also revealed a significant negative association between father involvement and perceived financial threats amongst women (b_3 path), $b = -0.22$, ($SE = 0.07$), $t = -2.95$, $p \leq 0.01$. Specifically, higher perceived father investment was related to significantly fewer financial threats, and vice versa. Analyses utilizing 5,000 bootstraps resamples were performed, and the 95% confidence interval for the indirect effect contained zero (-0.01, 0.23), and thus, non-significant.

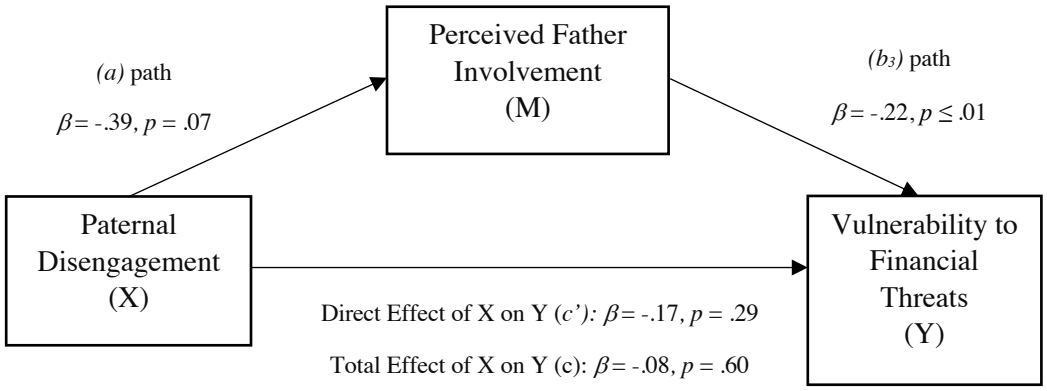

Figure 4. Mediating effect of perception of father involvement on cues of paternal disengagement and women's perceived vulnerability to threats of financial instability.

General Discussion

Applied research using Paternal Investment Theory (PIT) has consistently highlighted the robust connection between father investment and the sociosexual outcomes in daughters.

Findings from this research body argue that low quality paternal investment signals to the daughters that male investment in the local ecology is unreliable and inconsistently available. These signals give rise to early sexual development and unrestricted sexual activities amongst daughters while also shaping their subsequent expectations for male investment. Operating from the PIT framework, the present study tested the effects paternal disengagement (vs. engagement) on daughters' self-perceived mate values, a functional tool that shapes mating decisions amongst daughters. Contrary to my hypothesis, the results collected from 101 college participants via Zoom revealed that cues paternal disengagement did not have a negative impact on women's self-perceived mate values. Although non-significant, the results were trending where women in the paternal disengagement condition reported slightly higher mate value scores than women in the paternal engagement condition. This result pattern differs from previous findings regarding the negative impact of low parental investment on the offspring's mate values (Antfolk & Sjolund, 2018). It is possible that conducting this study on Zoom – a non-traditional research setting that arose during the COVID-19 pandemic – might have interfered with participant responses to a highly self-conscious construct such as mate value. Findings from Ratan et al. (2020) illustrated that women were more likely to experience Zoom fatigue than men, an effect that was mediated by facial dissatisfaction. Considering that our sample includes solely female participants, these Zoom-related effects might have confounded their facial perceptions and thus, affected their self-perceived mate values. In conclusion, I did not find evidence to support the hypothesis that women primed with paternal disengagement would report lower self-perceived mate value than women primed with paternal engagement.

Although the main hypothesis analysis yielded non-significant results, I conducted additional exploratory analyses to help direct future studies. These findings suggest that

compared to women primed with paternal engagement, women primed with cues of paternal disengagement perceived their father as less involved. Specifically, cues of low paternal investment (i.e., paternal disengagement prime) were associated with a psychological shift in which women perceived their fathers as less accessible, responsible, and emotionally close. Such shifts in perceptions were associated with greater propensity toward permissive sexual attitudes in women, specifically interest in short-term sexual commitment and variety in sexual partners. This specific finding is consistent with previous experimental research linking similar cues of paternal disengagement with permissive sexual attitudes in women (DelPriore & Hill, 2013). However, my exploratory results suggested that women's perceptions of their father involvement might act as an intervening mechanism on the effects of paternal investment and daughters' sexual strategies. Additional exploratory analyses also demonstrated that women who perceived their fathers as less involved were more likely to think of themselves as more vulnerable to emotional isolation and financial threats. These psychological shifts in women's sociosexual attitudes suggested that cues of unreliable male investment might prompt women to seek out short-term relationships to secure immediate access to financial resources as protection against financial threats (Greiling & Buss, 2000; Vigil et al., 2006) and secure intimacy as protection against isolation (Cooper et al., 1998). However, the latter result regarding intimacy might need additional support from more contemporary research.

Overall, the above exploratory findings (if replicated in future studies) could add to the body of research on intervening biosocial mechanisms that mediate the relationship between paternal investment and daughters' sociosexual outcomes. Amongst these intervening mechanisms is women's perceptions of male mating and sexual intents, which mediate the effects of paternal disengagement on women's unrestricted sexual behaviors (e.g., flirting,

permissive sexual attitudes) (DelPriore et al., 2017). DelPriore and colleagues discovered that women's expectations for men as partners also acted as an intervening mechanism, relating quality of fathering, specifically paternal social deviance, to the number of sexual partners amongst daughters (DelPriore et al., 2019). The current exploratory results supplement these established findings by providing evidence for perceptions of father involvement as an intervening variable in the relationship between paternal disengagement and daughters' sociosexual attitudes, specifically, sexual permissiveness and perceived vulnerability to isolation and financial threats.

Limitations and Future Directions

Although the current work is well-poised to pioneer a new research branch in the PIT framework, this study is not without limitations. As previously mentioned, the Zoom research setting might have influenced women's responses to their self-perceived mate value, especially during the height of the COVID-19 pandemic. Such a self-conscious measure is highly susceptible to the Zoom camera, where participants knew that researchers were monitoring their surroundings to deter active distractions such as phone usage. Although participants did not actively observe their faces like ordinary virtual meetings, the awareness of the camera might have confounding effects on how attractive and desirable women view themselves (Ratan et al., 2020). It is critical that future studies conduct similar experiments in traditional research settings to accurately assess the effects of paternal disengagement on women's self-perceived mate value. Furthermore, additional research is necessary to investigate whether the potential effects of father investment on daughters' mate values also extend to mother investment. The PIT literature provides substantial evidence for father-specific effects on women's sexual strategies and sexual outcomes. Yet, recent research suggested that the offspring's SPMV, specifically, were more

sensitive to cues of mother investment than father investment (Antfolk & Sjolund, 2018). Future studies should compare the effects of paternal disengagement versus maternal engagement on daughters' SPMV to unravel the nature of this relationship.

Another limitation in our study pertains to the interaction between women's actual family history (e.g., actual father absence due to divorce or other disruptions) and the proxy father absence condition introduced by the experimental prime. A classic study by Griskevicius et al. (2011) suggested that individual responses to ecologically primed stressors varied based on their developmental history. Specifically, individuals from stressful and resource-scarce environments favored more immediate reproductive strategies in response to primed ecological threats, whereas those from resource-plentiful environments gravitated towards delayed reproductive strategies to instead focus on education or career advancements. Based on these findings, it is unclear whether elements of women's family history, such as parent's marital status, might have interfered with women's responses to the paternal disengagement prime, as parental divorce might signal stressful and resource-scarce environments during childhood. Considering that about 75% of participating women had parents who were married at the time of the study, it is possible that women with lived experience of father absence in the rest of our sample might be more attuned to cues of paternal disengagement and responded stronger to our primes. Therefore, our results might not be generalizable to women who experienced actual father absence throughout their developmental childhood. Although future research should address the interaction between the experimental primes and women's family history, the current study introduces the possibility of father-specific effects on sociosexuality even amongst women from intact families.

A final limitation of the present study is the marginal effect the paternal disengagement primes on women's perceptions of their father involvement in the mediation models. With the non-traditional research setting, these exploratory results are still susceptible to the unique effects of Zoom on women's responses. Moreover, the small sample size of 101 participants in the current study is considered under-powered for complex mediational analyses (Fritz & MacKinnon, 2007). Although the mediation results open new and interesting grounds for additional investigation, future studies with adequately powered sample size are necessary to replicate (or refute) these findings.

References

Antfolk, J., & Sjölund, A. (2018). High parental investment in childhood is associated with increased mate value in adulthood. *Personality and Individual Differences*, *127*, 144-150.

Coley, R. L., Votruba-Drzal, E., & Schindler, H. S. (2009). Fathers' and mothers' parenting predicting and responding to adolescent sexual risk behaviors. *Child development*, *80*(3), 808-827.

Cooper, M. L., Shapiro, C. M., & Powers, A. M. (1998). Motivations for sex and risky sexual behavior among adolescents and young adults: a functional perspective. *Journal of personality and social psychology*, *75*(6), 1528.

Conroy-Beam, D., Goetz, C. D., & Buss, D. M. (2016). What predicts romantic relationship satisfaction and mate retention intensity: mate preference fulfillment or mate value discrepancies? *Evolution and Human Behavior*, *37*(6), 440-448.

DelPriore, D. J., & Hill, S. E. (2013). The effects of paternal disengagement on women's sexual decision making: An experimental approach. *Journal of personality and social psychology*, *105*(2), 234.

DelPriore, D. J., Proffitt Leyva, R., Ellis, B. J., & Hill, S. E. (2018). The effects of paternal disengagement on women's perceptions of male mating intent. *Journal of personality and social psychology*, *114*(2), 286.

DelPriore, D. J., Shakiba, N., Schlomer, G. L., Hill, S. E., & Ellis, B. J. (2019). The effects of fathers on daughters' expectations for men. *Developmental psychology*, *55*(7), 1523.

Dick, G. L. (2004). The fatherhood scale. *Research on social work practice*, *14*(2), 80-92.

Ellis, B. J., Bates, J. E., Dodge, K. A., Fergusson, D. M., Horwood, L. J., Pettit, G. S., & Woodward, L. (2003). Does father absence place daughters at special risk for early sexual

activity and teenage pregnancy? Child Development, 74, 801–821. http://dx.doi.org/10.1111/1467-8624.00569.

Ellis, B. J. (2004). Timing of pubertal maturation in girls: An integrated life history approach. Psychological Bulletin, 130, 920–958. http://dx.doi .org/10.1037/0033- 2909.130.6.920.

Ellis, B. J., Schlomer, G. L., Tilley, E. H., & Butler, E. A. (2012). Impact of fathers on risky sexual behavior in daughters: A genetically and environmentally controlled sibling study. Development and Psychopathology, 24, 317–332. http://dx.doi.org/10.1017/S095457941100085X.

Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological science*, *18*(3), 233-239.

Greiling, H., & Buss, D. M. (2000). Women's sexual strategies: The hidden dimension of extra-pair mating. *Personality and individual Differences*, *28*(5), 929-963.

Griskevicius, V., Delton, A. W., Robertson, T. E., & Tybur, J. M. (2011). Environmental contingency in life history strategies: The influence of mortality and socioeconomic status on reproductive timing. *Journal of Personality and Social Psychology*, 100, 241–254. doi:10.1037/ a0021082.

James, J., Ellis, B. J., Schlomer, G. L., & Garber, J. (2012). Sex-specific pathways to early puberty, sexual debut, and sexual risk taking: Tests of an integrated evolutionary-developmental model. *Developmental Psychology*, 48, 687–702. doi:10.1037/a0026427.

Hromatko, I., Bajoghli, H., Rebernjak, B., Joshaghani, N., & Tadinac, M. (2015). Relationship satisfaction as a function of mate value. *Evolutionary Behavioral Sciences*, *9*(4), 242.

Ratan, R., Miller, D. B., & Bailenson, J. N. (2022). Facial Appearance Dissatisfaction Explains Differences in Zoom Fatigue. *Cyberpsychology, Behavior, and Social Networking*, *25*(2), 124-129.

Regan, P. C. (1998). What if you can't get what you want? Willingness to compromise ideal mate selection standards as a function of sex, mate value, and relationship context. *Personality and social psychology bulletin, 24*(12), 1294-1303.

Salkicevic, S., Stanic, A. L., & Grabovac, M. T. (2014). Good mates retain us right: Investigating the relationship between mate retention strategies, mate value, and relationship satisfaction. *Evolutionary Psychology*, *12*(5), 147470491401200512.

Schwarz, S., Mustafić, M., Hassebrauck, M., & Jörg, J. (2011). Short-and long-term relationship orientation and 2D: 4D finger-length ratio. *Archives of sexual behavior*, *40*(3), 565-574.

Simpson, J. A., & Gangestad, S. W. (1991). Individual differences in sociosexuality: evidence for convergent and discriminant validity. *Journal of personality and social psychology*, *60*(6), 870.

Appendix 1

Unrestricted Sociosexuality

Please indicate which statement is most true of you.

Sex with multiple partners is acceptable (1)	Neither statement is true of me (5)	Sex should be with only one special person (9)
Cheating on a partner is OK as long as you are never caught (1)	Neither statement is true of me (5)	Cheating on a partner is never acceptable under any circumstances (9)
I find the idea of brief sexual encounters exciting (1)	Neither statement is true of me (5)	I am only interested in long-term commitment (9)
Long term romantic relationships are not for me (1)	Neither statement is true of me (5)	I would like to have a romantic relationship that lasts forever (9)
I would be OK about never settling down with one person in my lifetime (1)	Neither statement is true of me (5)	I would like to have at least one long term, committed relationship in my lifetime (9)
Variety in sexual partners is more important (1)	Neither statement is true of me (5)	Finding one special sexual partner is more important (9)
When picking and dating sexual partners, more variety is better (1)	Neither statement is true of me (5)	When picking and dating sexual partners, I definitely have a "type" (9)

Perceived Vulnerability to Isolation

1. In general, I am susceptible to feeling lonely.

2. My past experiences make me believe that I am likely to have a hard time relating to others.
3. I tend to have someone that I can share my experiences and feelings with.
4. Compared to my peers, I am more likely to feel connected with people.
5. I have a history of not having many friends.
6. My life situations prevent me from being close to friends and family.

Perceived Vulnerability to Financial Threats

1. If there is a crisis going on, I am more likely than the people around me to have a tough time financially.
2. I am more likely than the people around me to be broke.
3. Compared to my peers, I often fall behind paying my bills.
4. My past experiences make me believe that I will have enough money during time of crisis.
5. My past experiences make me fear I might go bankrupt in the future.
6. I have a history of finding myself in debt.