The Psychometric Properties of a New Scale of Dehumanizing Deindividuation in Couples

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Author Note

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This study complied with Transparency and Openness Promotion (TOP) Guidelines. The study PI, Rebecca L. Brock (rebecca.brock@unl.edu), should be contacted to request access to research materials, analysis code, and data to inform meta-analyses and replication studies. This study was not preregistered. The final version of the *Dehumanizing Deindividuation in Couples (DDC)* scale and scoring procedures are available as supplemental material and can be accessed free of charge by contacting the corresponding author. This study's design and analysis were not pre-registered. Data from these samples have been published elsewhere (e.g., Brock et al., 2023); however, this is the first study to present data on the psychometric properties of the DDC.

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Author Contributions

Brock: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing-original draft, Writing-review and editing. **Gervais**: Conceptualization, Data curation, Investigation, Methodology, Writing-original draft, Writing-review and editing.

Abstract

Emerging research indicates that dehumanization may occur in couples with serious consequences; however, this research is in its infancy, and there is a need to integrate dehumanization perspectives with key theories of intimate relationships to best understand this phenomenon. Drawing on work on individuation in couples, we present an integrated framework of dehumanizing deindividuation that is characterized by derogation (viewing a partner with contempt), disregard (ignoring or overlooking a partner), and denial of autonomy (restricting a partner's self-determination). We present data from two samples highlighting the reliability and validity of a new measure, the *Dehumanizing Deindividuation in Couples (DDC)* scale, which was internally consistent and had excellent construct replicability. Enacted and received versions of the scale were highly correlated, suggesting that dehumanizing deindividuation may be reciprocal in nature. The DDC scale converged with other couple dehumanization and individuation measures, but was distinct and demonstrated incremental utility in explaining key relational outcomes. The DDC also demonstrated excellent convergent validity with other measures of intimate relationship functioning (i.e., emotional intimacy, support, sexual quality, affective communication, problem-solving), and uniquely predicted key relational outcomes (i.e., global satisfaction and intimate partner violence). Results also suggest that the active process of deindividuating one's partner (e.g., acting superior to partner, ignoring partner, nagging partner) poses unique and significant risk for relationship discord and violence beyond a general lack of individuation (e.g., not praising partner's strengths or asking for their opinions). The DDC could prove a valuable tool for future research on dehumanizing deindividuation in couples.

Introduction

Dehumanization—seeing and treating someone as less than fully human (Bandura et al., 1975; Haslam, 2006; Kelman, 1973; Nussbaum, 1995)—often arises when someone denies a fellow human being "identity" and "community." Identity perception involves conferring someone autonomy, seeing the person "as an individual, independent and distinguishable from others, capable of making choices, and entitled to live his own life on the basis of his own goals and values," while community perception involves seeing another person as a worthy relational partner—"part of an interconnected network of individuals who care for each other, who recognize each other's individuality, and who respect each other's rights" (Kelman, 1973, p. 48-49). However, like other theorists, Kelman primarily discussed this dehumanizing deindividuation phenomenon in the intergroup context (e.g., violence, discrimination) rather than in close relationships. Intimate partners have a wealth of humanizing knowledge about each other and form strong, positive bonds with a specific unique individual, which reduces the likelihood of dehumanization. Consequently, dehumanization within intimate relationships is rarely studied compared to its occurrence in intergroup contexts, such as dehumanizing outgroups (e.g., racial and ethnic minorities, immigrants), men's sexual objectification of women (outside of the context of committed relationships), and dehumanization of people on the fringes of society (e.g., people who are unhoused; people who suffer from addiction).

Yet, emerging research indicates that dehumanization *does* occur in couples, with myriad adverse consequences. Viewing romantic partners as sexual objects rather than full-fledged human beings (Fredrickson & Roberts, 1997; Nussbaum, 1995), correlates with lower relationship satisfaction (Mahar et al., 2020; Sáez et al., 2019; Zurbriggen et al., 2011), diminished relationship quality (Ramsey et al., 2017; Strelan & Pagoudis, 2018), and reduced sexual satisfaction (Brock et al., 2021; Sáez et al., 2019). Sexual objectification in couples is also linked to increased violence, including sexual coercion (Ramsey & Hoyt, 2015) and intimate partner aggression, partly due to hindered empathy stemming from less recognition of human traits in one's partner (Sáez et al., 2022). Beyond objectification, dehumanization can manifest in

viewing partners as animal-like (e.g., denying them human uniqueness) or machine-like (e.g., denying them human nature, Pizzirani et al., 2019; see also Haslam, 2006) For example, Pizzirani and colleagues developed the *Dehumanization in Romantic Relationship Scale* (DIRRS) to assess the extent to which someone sees their partner as immature or unrefined (human uniqueness denial) or exploitable and emotionless (human nature denial). Research using the DIRRS provides evidence of both animalistic and mechanistic dehumanization in romantic relationships with upticks in dehumanization on the DIRRS predicting higher rates of intimate partner violence over time (IPV; Pizzirani & Karantzas, 2019).

Despite these alarming findings, research on couple dehumanization remains limited. A major obstacle is that existing studies often rely on measures designed for other contexts, such as street harassment (e.g., ogling a stranger on the street) or workplace sexual harassment (e.g., appearance commentary from a boss), without adapting them to the unique dynamics of intimate relationships. For instance, Meltzer and McNulty (2014) demonstrate that appearance valuation (a key indicator of sexual objectification) can sometimes *enhance* relationship satisfaction, a nuance that is largely absent from the literature. Likewise, behavior management may feel appropriate from a supervisor at work, but undermine autonomy (e.g., "bossy") when it comes from an intimate partner, given different expectations for work and intimate relationships. Similarly, research on animalistic and mechanistic dehumanization in couples (Pizzirani et al., 2019; Pizzirani & Karantzas, 2019) originated from intergroup and interpersonal theories (Haslam, 2006). The DIRRS has proven to be a valuable addition to the literature, but couples report low rates of dehumanization on this measure. A close inspection of the items reveals that they tend to capture relatively extreme and abstract expressions of dehumanization. For example, items focus on general, trait-like treatment of a partner as if they are heartless, a means toward an end, or lacking social status, rather than specific, concrete behaviors that are more common in couples and relatable to participants. Thus, the literature on couple dehumanization has benefitted from theories in other contexts, but it is also important to examine how dehumanization and its correlates manifest specifically in couples. To address this gap, the

present research introduces a complementary framework and new measure, integrating insights from existing couples research on the importance of *individuation* (Brock et al., 2023; see also Bell, 2021) with work on dehumanization.

A Framework of Dehumanizing Deindividuation in Couple Relationships

In adult intimate relationships, *individuation* is characterized by clear interpersonal boundaries (e.g., limits on time spent together), respect for individual opinions of each partner, and validation of one another as unique individuals (Bell, 2021; Brock et al., 2023). An underlying assumption of individuation is that every single human being is unique and has inherent worth, and this should be respected in intimate relationships. For example, in *family systems theory* (Bowen, 1993; Minuchin, 1985; Minuchin, 2012), both connectedness and individuality are necessary in healthy relationships; thus, there should be autonomy for each individual (e.g., through boundary setting; respecting the other to make their own decisions) but also dependency and trust (Snir & Wiseman, 2013). Relatedly, the *circumplex model of marital and family systems* (Olson et al., 2019) suggests that a family achieving cohesion (e.g., emotional bonding) depends, in part, on finding a balance between separateness and togetherness. Individuation also has close ties to *attachment theory* (Bowlby, 1988), which suggests that couples develop *a secure base* (i.e., mutual sense of safety and security) from which each partner can venture out and pursue individual goals, knowing they can return for comfort. A defining feature of a secure base is that each member of a dyad feels a *unique* and non-interchangeable connection with the other person (Marvin et al., 2016). Finally, a lack of individuation can occur when there is either disengagement, or limited differentiation of partners (i.e., enmeshment). In cases of enmeshment, one's partner is instrumentalized or viewed solely or primarily through one's own needs, instead of as a separate individual with their own autonomy, including self-determined unique thoughts, feelings, goals, and ideas (Bell, 2021). This perspective aligns with *optimal distinctiveness theory* (Brewer, 1991) which suggests that individuals are continually striving to balance affiliation needs—through identifying and connecting with their partner—with the need for autonomy as an independent self-determined human being (Slotter et al.,

2014). As summarized by Bell (2021), “An individuated relationship involves clear interpersonal boundaries—respect for each person's individuality and personal autonomy.”

Research supports the assertion that individuation is a critical feature of healthy intimate relationships. Specifically, individuality in couples, including features such as acceptance and autonomy support, has strong ties to adaptive relationship functioning and individual health (e.g., Eckstein et al., 2014; Lac & Luk, 2019; Osamor & Grady, 2018; Ramsdell et al., 2019), and a recent systematic investigation of the structure and specific manifestations of individuation in couples suggests that relational processes that promote a partner’s unique and inherent worth (e.g., treating partner with respect, praising partner’s strengths and accomplishments, valuing partner’s thoughts and opinions) are central to this experience (Brock et al., 2023). In contrast, an absence of individuation has the potential to create vulnerabilities in the relationship that could, over time, escalate into more adverse and detrimental couple dynamics that undermine someone’s autonomy. Indeed, failures to acknowledge a partner’s individuality (acts of omission) could proliferate into behaviors that *actively undermine* a partner’s unique and inherent worth (acts of commission). For example, failing to individuate a partner might mean not consulting them for their opinions on important issues, while deindividuation involves actively dismissing their views, presenting one’s own as superior, and pressuring partners to act in ways that conform to your perspective. Recent research suggests that deindividuation and individuation, although related, are distinct processes in couple relationships (Brock et al., 2023).

Revisiting early work by Kelman (1973) and integrating recent work on individuation in couples (Brock et al., 2023) with classic theorizing around dehumanization (Haslam, 2006), we propose that *de*individuating a partner is a form of dehumanization that involves actively stripping away their individual identity and excluding them from community including the circle of mutual care and concern. Such exclusions could be particularly problematic in couples, given the centrality of emotional attachment and mutual bonding in these relationships (Bowlby, 1988; Olson et al., 2019). What might dehumanizing deindividuation in couples look like? A primary form of identity denial is restricting a partner’s autonomy and self-determination, for example

when partners are excessively controlling or bossy (Brock et al., 2023). Denying community to a partner may involve derogation, that is "looking down on" a partner with contempt and self-superiority (e.g., dismissing their views as wrong). Indeed, contempt and its correlates are central emotions implicated in dehumanization (Harris & Fiske, 2006; Giner-Sorolla, Martínez, Fernández, Chas, 2023). Another means of placing a partner outside the circle of mutual care is disregard, that is "looking through" a partner by dismissing them (e.g., ignoring a partner). Derogation maps onto human uniqueness denial while disregard maps onto human nature denial (Haslam, 2006), and frequent or pervasive instances of these behaviors may contribute to dehumanizing dynamics in couples (Karantzas et al., 2023). Importantly, someone may dislike a partner's approach to conflict, finances, or parenting, but still respect their partner's thoughts and feelings, accepting their partner "warts and all." In fact, a central aspect of individuation is a sense of acceptance of a partner as a multifaceted—a flawed, yet still worthy individual. In such instances, they may express their frustration and disappointment through open communication, whereas persistent denial of autonomy, derogation, and disregard may communicate that their partner's thoughts and feelings as a fellow human being do not matter.

This conceptualization of *dehumanizing deindividuation* also converges with work on sexual objectification in couples. For example, feminist philosopher Martha Nussbaum (1995) delineated conditions when focusing on a partner's bodily appearance or sex becomes dehumanizing in heterosexual relationships. She argues that while body and sex valuation can enhance intimacy, they can become dehumanizing when accompanied by belittlement of the partner's thoughts, feelings, or accomplishments and in the absence of mutual respect and regard. Researchers have assessed non-physical valuation (NPV, Meltzer & McNulty, 2014) as an indicator of humanization and found that failing to value a partner's internal attributes—such as humor or intellect—undermines relationship functioning (Brock et al., 2021). Further, recent research suggests that when intimate partners are more fungible (i.e., interchangeable), as evidenced by diminished attachment security, partners are also more likely to report feeling dehumanized and objectified (Calkins et al., 2023; see also Jiao et al., 2022). Central to

Nussbaum's consideration is the denial of autonomy; if a partner's inherent worth is subjugated or ignored, then they are subjected to disproportionate control rather than respected as an autonomous individual deserving of self-determination.

The Dehumanizing Deindividuation in Couples (DDC) Scale

While most existing scholarship on dehumanization has overlooked these dynamics within couples, recent advances highlight the relevance of focusing on behaviors that signal derogation and disregard facilitating denial of autonomy for understanding dehumanization specific to the couple context. For example, based on findings from the DIRRS (Pizzirani et al., 2019), Karantzas, Simpson, and Haslam (2023) suggested that demeaning and dismissing behavior may be key features of dehumanization in intimate relationships. Furthermore, in the process of developing a measure of *Individuality in Couples,* Brock et al. (2023) identified a set of items reflecting derogation, disregard, and denial of autonomy in intimate relationships, and these items formed a cohesive factor—what we refer to as the *Dehumanizing Deindividuation in Couples* (DDC) scale in this paper—that was related to but also distinct from individuation measured with the ICQ (e.g., respecting and accepting partner, giving partner personal space).

Dehumanization scholars have noted that dehumanization is a multifaceted, heterogenous construct and that it is important to specify the specific variety of dehumanization under investigation and its relation with other dehumanization measures (Landry & Seli, 2024), the DDC reflects relatively subtle forms of dehumanization (e.g., treating partner as a child) whereas more explicit measures of dehumanization, such as the Ascent of Humans measure (Kteily et al., 2015), ask whether a person is seen as a literal or metaphorical animal or machine. Like the DIRRS, the DDC assess perceptions of partners that imply a step toward dehumanization while still recognizing them as human (e.g., seeing a partner as child-like still involves seeing a partner as a *human* child). While blatant dehumanization is likely very rare in couples, a more relative form of dehumanization—where one partner is seen as less human compared to oneself or others (Haslam & Loughnan, 2014)—is probably more common. The DDC contains common couple behaviors that reflect the active undermining of a partner's individuality in the form of

derogation, disregard, and denial of autonomy (e.g., acting superior, talking over partner, being bossy) that could emerge across different types of romantic relationships (e.g., dating or married couples) in a variety of relationship domains (e.g., household chores, sex, finances). Thus, the DDC has the potential to complement other measures of dehumanization (e.g., the DIRRS) and fill a critical gap in the literature by focusing on specific behaviors arising in the intimate relationship context, behaviors that might otherwise be overlooked but ultimately represent harmful forms of dehumanizing one's partner.

In sum, we have presented a dehumanizing deindividuation framework that maps onto the theorizing and limited findings in literatures on deindividuation, dehumanization, and objectification in couples, suggesting that the DDC could be a valuable tool for advancing research in this area. However, the DDC's psychometric properties and validity remain unclear. This study aims to fill this gap in the literature with a robust consideration of the DDC's reliability and validity, thereby enhancing the utility of this measure for future research.

The Present Study

As part of a scale development project for the *Individuality in Couples Questionnaire* (ICQ; Brock et al., 2023)—a measure of respect for individuality and autonomy support in intimate relationships—a large pool of items was generated, and factor analyses revealed a distinct factor that appeared to represent dehumanizing disregard and contempt from partner (e.g., "My partner ignored me," "My partner seemed to be irritated by me," "My partner was bossy toward me"). The primary goal of the present study was to examine the potential for these items to form an internally consistent scale that taps into a key manifestation of dehumanization in intimate relationships operationalized as *dehumanizing deindividuation*. Consistent with this goal, we pursued five aims. First (**Aim 1**), in sample of 247 undergraduate students in committed, intimate relationships, we aimed to replicate the factor structure of the DDC scale. Second (**Aim 2**), research suggests that dehumanization can be a reciprocal process (Bustillos et al., 2023; Strelan & Pagoudis, 2018); thus, we tested the reliability and validity of a parallel version of the DDC designed to assess *enacted or perpetrated* dehumanizing deindividuation

directed toward partner (e.g., "I disregarded my partner's opinions") to complement the original scale which was focused on *received* dehumanization (e.g., "My partner disregarded my opinions"). We also examined correlations between the enacted and received versions of this scale to initially explore the degree to which DDC might be reciprocal and dyadic in nature.

Third (**Aim 3**), we tested convergent, discriminant, criterion, and incremental validity of DDC scores (received, enacted, and dyadic composites) with other, relatively new but reliable, measures of couple dehumanization. Specifically, we examined correlations between the DDC and the NPV scale and the DIRRS. We anticipated significant positive correlations of moderate to large magnitude, suggesting that the DDC assesses a form of dehumanization in couples; however, we did not expect correlations to be so large to suggest they are not unique dimensions of the multifaceted construct of dehumanization couples (Landry & Seli, 2024). We then examined the unique utility of DDC scores for explaining variance in two key relational outcomes—global relationship satisfaction and IPV— controlling for the NPV and DIRRS.

Fourth (**Aim 4**), using secondary data analysis in a community sample of 445 individuals in intimate relationships, a sample used in the Brock et al., 2023 scale development project, we tested convergent, discriminant, criterion, and incremental validity of DDC scores with measures of other key intimate relationship processes including emotional intimacy, quality of partner support, sexual satisfaction, affective communication, and problem-solving communication. We anticipated moderate to large correlations suggesting that the DDC assesses a dimension of intimate relationship quality; however, we did not expect correlations to be so large to suggest they are not unique dimensions of intimate relationship quality which is multifaceted in nature (Lawrence et al., 2009; Ramsdell et al., 2019). We then examined the incremental validity of DDC scores for explaining variance in two key relational outcomes – global relationship satisfaction and IPV, controlling for each of the aforementioned relationship processes.

A fifth and final aim (**Aim 5)** was to investigate the incremental validity of the DDC controlling for (lack of) individuation in the relationship. To pursue this aim, we revisited the models in Aim 3 (college students) and Aim 4 (community sample) and added scores from the

Individuality in Couples Questionnaire (ICQ; Brock et al., 2023), which measures the extent to which someone feels respected by their partner for their individuality and experiences personal autonomy in the relationship. We hypothesized that DDC scores would uniquely predict lower global relationship satisfaction and higher risk for IPV when controlling for individuation in the couple relationship, along with the other previously identified controls. This was critical for determining whether the active process of deindividuating one's partner (e.g., treating partner like a child, acting superior, ignoring partner) captured by the DDC adds incremental validity for explaining relational outcomes above and beyond a lack of individuation (e.g., failures to respect and value partner, lack of freedom to pursue individual interests) in intimate relationships.

Sample 1: Undergraduate and Dehumanization Measures

Participants and Procedure

Participants were 247 undergraduates ranging from 17 to 44 years of age (M = 19.51, SD = 2.68) who self-reported being in an intimate relationship. Most participants self-identified their relationship as committed (96%) while 2.8% of participants were engaged and 2.0% were married. A majority were not currently cohabiting with their partner (87.4%). The sample comprised 61 male/men participants (24.7%) and 186 female/women participants and largely consisted of cisgender women (74.9%) while cisgender men comprised 24.3% of our sample, and two individuals identified as non-binary (0.8%). Most identified as heterosexual/straight (83%) while 10.1% identified as bisexual, 1.2% as lesbian, 1.2% as pansexual, 1.2% as queer, and 3.2% reported being unsure/questioning. The majority identified as White only (79.8%), while 2.4% identified as African American/Black, 7.2% identified as Asian American or Pacific Islander American/Asian or Pacific Islander, 8.9% identified as Latinx or Hispanic American/Latinx or Hispanic; 1.2% identified as Middle Eastern or North African American/Middle Eastern or North African; .8% identified as Native American/American Indian/Indigenous and .4% identified as another race/ethnicity.

All procedures were approved by the Institutional Review Board at The University of Nebraska-Lincoln. Participants were recruited from a Psychology Department subject pool via

Sona for a study described as "Psychology Mass Screening Survey." Eligibility criteria for this project included (a) English reader, and (b) in a self-identified intimate relationship. Participants consented from their own device (e.g., computer, smart phone) via Qualtrics and were redirected to an online survey. Participants were compensated with course credit. A total of 639 individuals enrolled in the larger survey, but this project consisted of the 247 individuals.

Measures

Convergent Validity. We assessed animalistic and mechanistic dehumanization with the DIRRS which consists of 24 items assessing the receipt and perpetration of dehumanization on a Likert scale (1 = *strongly disagree* to 7 = *strongly agree*). Items were averaged, and higher scores reflect more dehumanization (enacted: $M = 1.24$, $SD = .47$; received: 1.26, $SD = 0.46$). Internal consistency was good in this sample (enacted: $\alpha = 0.88$; received $\alpha = 0.86$). We also assessed non-physical valuation (NPV) of one's partner (Meltzer & McNulty, 2014; see also Brock et al., 2021; Calkins et al., 2023) in line with Nussbaum's (1995) theorizing that in relationships marked by a strong focus on sexual appeal and sex, valuation of non-physical traits represents a central element of humanization. The NPV measure contains 13 items and assesses the extent that someone believes their partner values them for non-physical qualities (e.g., intelligence, tendency to be fun, creativity, ambition, kindness, generosity, patience, career success, trustworthiness, ability to solve problems, humor, loyalty, and supportiveness) on a scale from 0 (*not at all*) to 100 (*completely*). Parallel items assess the degree to which the participant perceives their partner in this way (enacted). Items were averaged, and higher scores reflect less dehumanization (enacted: $M = 87.75$, $SD = 91.54$; received: 84.70, $SD = 13.55$). Internal consistency was excellent (enacted: $\alpha = 0.91$; received $\alpha = 0.90$) in this study.

Criterion Validity. Global relationship satisfaction, considered one of the key outcomes in couples research (Bradbury et al., 2000), was assessed with the *Couples Satisfaction Index* (CSI-4; Funk & Rogge, 2007, 4 items). Participants were asked to rate their degree of happiness, all things considered, in the relationship on a 6-point scale (0 = *extremely unhappy,* 1 = *fairly unhappy,* 2 = *a little unhappy,* 3 = *happy*, 4 = *very happy,* 5 = *extremely happy,* 6 = *perfect*).

Participants are also asked to rate the degree to which they have a warm and comfortable relationship with partner (0=*not at all true* to 5=*completely true*), how rewarding the relationship is (0=*not at all* to 5=*completely*), and how satisfied they are with the relationship (0=*not at all* to 5=*completely*) with higher sum scores reflecting more satisfaction (α = 0.88; *M* = 16.95, *SD* = 3.06). Frequency of IPV in the current intimate relationship over the past year was measured with the short form of the *Revised Conflict Tactics Scale* (Straus & Douglas, 2004) on a 6 point scale (1 = *once in the past year,* 2 = *twice in the past year,* 3 = *3-5 times in the past yea*r, 4 = *6-10 times in the past year,* 5 = *11-20 times in the past year*, 6 = *more than 20 times in the past year*). Consistent with recommended scoring procedures, items were recoded to reflect the midpoint of each response option (e.g., 5 was recoded as 15). Frequencies of psychological, physical, and sexual abuse items were summed to obtain scores of IPV perpetration (*M* = 1.25, *SD* = 2.50) and victimization (*M* = 1.35, *SD* = 2.51).

Individuation in Couples (Convergent and Incremental Validity). The *Individuality in Couples Questionnaire* (ICQ, Brock et al., 2023) contains 25 items that assess individuality in the context of couple relationships, including the degree to which people feel respected by their partner for their individuality and experience autonomy in the relationship over the past month (e.g., My partner valued my opinions and ideas). Participants respond on a 5-point Likert-type scale (1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral,* 4 = *agree*, 5 = *strongly agree*), and items were averaged. Higher scores represent more individuality and internal consistency of the scale was excellent in this sample (α = 0.94; *M* = 4.48, *SD* = 0.49).

Sample 2: Community Participants and Relationship Quality Measures

Participants and Procedure

Participants were 445 community members ranging from 19 to 69 years of age (*M* = 30, *SD* = 9.31) who were in a committed relationship for at least six months. The average relationship duration was 87.49 months (*SD* = 93.55). Nearly half of the sample was married (47.6%); 11.2% were engaged; 41.1% were dating but neither married nor engaged. Most participants (72.1%) were cohabiting with their partners. Most of the sample reported their

sexual orientation as heterosexual/straight (84%) while 8.3% identified as bisexual, 2.5% as lesbian, 1.8% as pansexual, 1.6% as gay, 1.6% as queer, and 0.2% as asexual. The majority of participants (65.4%) identified as female/woman, followed by 29.9% of participants identifying as male/man, 3.4% as genderqueer/gender non-conforming/non-binary, 0.9% as transgender man, and 0.4% as transgender woman. The sample primarily identified their race as White (86.7%), while 1.6% identified as Black or African American, 5.2% identified as Asian, 8.3% identified as Hispanic or Latino/a, 0.9% identified as American Indian or Alaskan Native, and 5.6% identified as more than one race. Over half of the sample (66.3%) was college educated.

Data were obtained from Brock et al. (2023). All procedures were approved by the Institutional Review Board at The University of Nebraska-Lincoln. Participants were recruited using flyers in the community and on social media for a study described as "How do couples stay healthy? Help us find out!". Eligibility criteria included (a) 19 years of age or older, (b) English speaking, (c) in a committed relationship of at least six months in duration, and (d) partner had not participated in this study. Participants consented from home via Qualtrics and were redirected to an online survey. Participants were compensated $35 for all study procedures, and their names were entered into a raffle to win an iPad.

Measures

Convergent Validity. We assessed several specific intimate relationship processes to allow for additional tests of convergent validity. Specifically, emotional intimacy was measured with the 15-item intimacy subscale of the *Sternberg Triangular Love Scale* (Sternberg, 1997). Participants rated their agreement with each item on a scale from 1 (*not at all*) to 9 (*extremely*), and items were summed with higher scores representing more intimacy ($\alpha = 0.95$; $M = 124.85$, $SD = 12.96$). Participants also completed the 25-item *Support in Intimate Relationship Scale—Revised* (SIRRS; Barry et al., 2009). Frequencies of specific support behaviors from partners over the past month were reported. Participants were also asked to indicate a preferred frequency for each behavior (more, less, or the same). A support adequacy score was calculated by summing item ratings of 0 = inadequate (would like more or less of that support) and 1 =

adequate (would like the same amount; α = 0.91; *M* = 18.24, *SD* = 6.17). Several subscales of the *Marital Satisfaction Inventory—Revised* (Snyder, 1997) assessed specific relationship processes, not global relationship sentiment, including *affective communication* (13 items; α = 0.80; *M* = 2.54, *SD* = 2.63) to assess poor communication patterns (e.g., difficulties opening up and confiding), *problem-solving communication* (19 items; α = 0.88; *M* = 4.25, *SD* = 4.30) to assess poor conflict resolution (e.g., arguments frequently end with feeling hurt or crying) and *sexual dissatisfaction* (13 items; α = 0.83; *M* = 3.83, *SD* = 3.30) to assess problems with the sexual relationship (e.g., disagreement about frequency of sexual relations). Participants answered true or false to each item, and sum scores were computed for each scale.

Criterion Validity. A latent variable of global satisfaction with the current relationship was modeled with three questionnaires: (a) the *Quality of Marriage Index* (QMI; Norton, 1983; 6 items; α = 0.94; *M* = 40.04, *SD* = 5.89), (b) the MSI-R (Snyder, 1997) *Time Together* scale (10 items; α = .80; *M* = 2.22, *SD* = 2.36; *lower* scores reflect more satisfaction with time spent together) and (c) the *Couples Satisfaction Index* (CSI-4; Funk & Rogge, 2007; 4 items; α = 0.91; *M* = 17.48, *SD* = 3.18). The short form of the *Revised Conflict Tactics Scale* (Straus & Douglas, 2004) assessed the frequency of IPV in the current relationship (IPV perpetration: *M* = 1.20, *SD* = 2.10) and (IPV victimization: *M* = 1.25, *SD* = 2.26).

Individuation in Couples (Convergent and Incremental Validity). As in Sample 1, we used the *Individuality in Couples Questionnaire* (Brock et al., 2023). In this sample, the internal consistency was excellent (25 items, α = 0.94; *M* = 4.37, *SD* = 0.53)

General Data Analysis Approach Across Samples

We report how we determined our sample size, all data exclusions, and all measures for each study; however, it is notable that some measures were administered that went beyond the scope of this paper's aims (e.g., stress and physical health) and, therefore, are not described. With regard to sample size, across both samples, we aimed to recruit at least 200 participants to support confirmatory factor analyses (Brown, 2015) and to achieve adequate power (.80, α = .05, two-tailed) to detect relatively small effect sizes (*r* = .20) for regressions with up to 7 predictors.

Analyses were conducted in Mplus 8.10 using the MLR estimator to address non-normality and missing data (< 1% in Sample 1 and < 10% in Sample 2). For overidentified models, global model fit was evaluated using the Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR), with CFIs above .95 and RMSEA and SRMRs below .05 indicating excellent model fit (Bentler, 1990; Browne & Cudeck, 1992; Hu & Bentler, 1995). Correlations and path coefficients were considered significant if $p < .05$. In Sample 1 ($N = 247$), this corresponded to $r > |.13|$, and in Sample 2 ($N = 445$) this corresponded to $r > |.09|$. Following Cohen's conventions (1992), correlations and Beta coefficients between .10-.29 were considered small in magnitude, .30-.49 were considered moderate, and > .50, were considered large. Correlations below .80 suggest that measures are sufficiently distinct to use as separate measures of constructs (Brown, 2015), a guideline that can be particularly useful in the context of multifaceted constructs, such as dehumanization and intimate relationship quality, when facets tend to have large correlations but also capture unique features. Indeed, in this context, this guideline can be used as one indicator of discriminant validity (Brown, 2015). Further, if the correlation between any two predictors in a model exceeded .70, scores were either aggregated (on conceptual grounds) or a Variance Inflation Factor (VIF; Hair et al., 2018) was computed. If VIF < 4, we retained distinct scores as predictors without posing multicollinearity concerns.

Results

Aim 1. Replication of DDC factor structure (Sample 1). The 11 items from the Brock et al., (2023) scale development project, reflecting dehumanizing disregard and contempt from partner, were modeled as indicators of a single factor. Global model fit was inadequate (CFI = .86, RMSEA = .095, SRMR = .059). Closer examination of residual covariances pointed to a source of redundancy, and we decided to drop "My partner interrupted me" (factor loading = .56) and retain "My partner talked over me" given the more active nature of this behavior and the larger factor loading (.60). The final scale consisted of 10 items, and the global fit of this revised model was excellent (CFI = .96, RMSEA = .053, SRMR = .042) with significant and salient

factor loadings (from .60 to .74). See Table 1 for a list of the items and factor loadings. The internal consistency of the final 10 items was excellent (McDonald's Omega = .88, AIC = .436, Cronbach's α = .88). Further, construct replicability (*h*) was .89 suggesting a well-defined and replicable factor (Mueller & Hancock, 2008; *h* > .80 is deemed excellent). The 10 items were averaged to compute a total received DDC score that was subsequently used in validity analyses.

Aim 2. Testing the reliability and validity of an enacted version of the DDC (Sample 1). Parallel versions of the 10 items retained in Aim 1, rephrased to assess *enacted* DDC toward partner (e.g., "I treated my partner like a child") instead of *received* from partner (e.g., "My partner treated me like a child"), were modeled as indicators of a single factor. Global model fit was inadequate (CFI = .86, RMSEA = .099, SRMR = .065), and closer examination of residual covariances pointed to additional shared variance between two items. After covarying the residuals of these items, global model fit was excellent (CFI = .97, RMSEA = .046, SRMR = .043), and factor loadings were all significant and salient (ranging from .55 to .73; see Table 1); however, we ultimately decided to retain both items given one is a feeling (i.e., "I was irritated by my partner), and the other reflects behaviors directed toward partner (i.e., "I was impatient and short with my partner"). Further, this overlap between items was not an issue when fitting the model for the received items, and we aimed to develop an enacted version that directly paralleled the received version. Internal consistency of the 10 items was excellent (McDonald's Omega = .88, AIC = .444, Cronbach's α = .88). Further, construct replicability (*h*) was .89 suggesting a well-defined and replicable factor (Mueller & Hancock, 2008; *h* > .80 is considered excellent). The 10 items were averaged to compute a total enacted DDC score.

As a final step, we examined the correlation between DDC-Enacted and DDC-Received scores. The correlation was very large (*r* = .72) suggesting that dehumanizing deindividuation may be a reciprocal process in couples and might reflect a dyadic quality of the relationship rather than isolated partner experiences. Accordingly, to prevent multicollinearity issues and other documented pitfalls of high inter-dyad correlations (Smith et al., 2022), we created a mean score across enacted and received scores. Notably, correlations between received and enacted

scores on the NPV (r = .83) and DIRRS (r = .72) were also very large; therefore, in addition to examining validity separately for received and enacted scores, we also ran validity analyses using a dyadic score (mean of enacted and received).

Table 1. Factor Loadings of 10 Items on Received and Enacted Versions of the DDC

Received Items	FL	Enacted Items	FL
My partner disregarded my opinions	0.68	I disregarded my partner's opinions	0.72
My partner treated me like a child	0.65	I treated my partner like a child	0.65
My partner acted superior to me	0.65	I acted superior to my partner	0.70
My partner ignored me	0.61	I ignored my partner	0.67
My partner talked over me	0.60	I talked over my partner	0.66
My partner told me they were right and I was wrong	0.59	I told my partner they were wrong and I was right	0.67
My partner seemed to be irritated by me	0.71	I was irritated by my partner	0.55
I felt like I got on my partner's nerves	0.64	My partner got on my nerves	0.56
My partner nagged me to do certain things or stop doing certain things	0.72	I nagged my partner to do certain things or stop doing certain things	0.68
My partner was bossy toward me	0.74	I was bossy toward my partner	0.73

Note. FL = factor loading. All factor loadings were significant at $p < .001$.

Aim 3. Validity of the DDC relative to other couple dehumanization measures (Sample 1). As expected, correlations of (dyadic) DDC scores with NPV (r = -.31) and DIRRS (r = .59) were significant, positive, and moderate to large in magnitude demonstrating good convergent validity and suggesting that the DDC captures a dimension of dehumanization in couples. A similar pattern of correlations was observed for received (DDC-NPV, r = -.34; DDC-DIRRS, r = .60) and enacted (DDC-NPV, r = -.19; DDC-DIRRS, r = .55) scores, except the correlation was small instead of moderate in magnitude for DDC with NPV for enacted. The correlation between NPV and DIRRS was also significant (r = -.40 for dyadic, r = -.36 for received; r = -.32 for enacted). However, correlations did not exceed .80 suggesting that the DDC, NPV, and DIRRS might capture distinct, yet related, forms of dehumanization that can manifest in couples. Demonstrating the incremental validity of DDC scores, results of path analyses (Table 2) demonstrate that the DDC was uniquely associated with (lower) global relationship satisfaction, greater perpetration of IPV, and greater IPV victimization, controlling

for NPV and DIRRS. This was regardless of whether the score was enacted only, received only, or the combined dyadic score. Notably, the NPV and DIRRS were each uniquely associated with relationship satisfaction suggesting each measure of dehumanization in couples has utility for explaining this relational outcome; however, only DDC scores explained a unique amount of the variance in IPV perpetration and victimization (i.e., NPV and DIRRS were not related to IPV).

Table 2. Incremental Validity Analyses in Sample 1

Model 1: Predicting Global Relationship Satisfaction			
	Received	*Enacted*	*Dyadic*
	β	β	β
DDC	**-0.21***	**-0.22***	**-0.22***
NPV	**0.17***	**0.25***	**0.18***
DIRRS	**-0.31***	**-0.31***	**-0.33***
Model 2: Predicting IPV Perpetration and Victimization			
	Received	*Enacted*	*Dyadic*
	β	β	β
Perpetration			
DDC	**0.23***	**0.31***	**0.31***
NPV	-0.04	0.05	0.04
DIRRS	-0.03	0.12	0.05
Victimization			
DDC	**0.26***	**0.32***	**0.32***
NPV	-0.10	-0.03	-0.03
DIRRS	0.13	0.18	0.17

Note. * < .05. IPV = Intimate Partner Violence. DDC = Dehumanizing Deindividuation in Couples. NPV = Non-Physical Valuation. DIRRS = Dehumanization in Romantic Relationships Scale. Standardized effects are reported, and significant paths are bolded. Interrelations of enacted and received scores of DDC (r = .72), NPV (r = .83), and DIRRS (r = .72) were large so we created a dyadic level score for each measure (average of enacted and received) and examined incremental validity of those scores. Higher scores on NPV reflect *less* dehumanization whereas higher scores on the DDC and DIRRS reflect *more* dehumanization. The residuals of IPV perpetration and victimization were covaried in Model 2.

Aim 4. Validity of the DDC relative to other measures of intimate relationship quality (Sample 2). Brock et al. (2023) demonstrated that DDC items loaded to a cohesive

factor that was distinct from individuation (e.g., “I felt respected by my partner”, “I had personal space when I needed it”), psychologically aggressive tactics (e.g., "My partner made spiteful, belittling comments about me”) and self-consciousness in the relationship (e.g., “I felt like I needed to edit myself around my partner”); however, no further analysis of those items was pursued in that paper given the focus on developing a measure of individuality in couple relationships. Therefore, prior to running validity analyses with DDC scores in this sample, we examined the internal consistency of items. Further, given that results of Aim 1 suggested that dropping “My partner interrupted me” would reduce redundancy, we followed the same scoring approach and created a composite (mean) based on those 10 items. The internal consistency of the 10 items was excellent (McDonald’s Omega = .88, AIC = .422, Cronbach’s α = .88).

As expected, correlations between the DDC (received) and measures of other key dimensions of the relationship were significant, moderate to large, and in the expected directions, demonstrating good convergent validity (Table 3); however, the DDC also appears to capture a distinct relationship dimension. Similar to results of Aim 3 (Sample #1), the DDC had significant correlations of moderate size, in the expected directions, with criterion validity measures – global satisfaction (r = -.57 for QMI, -.57 for CSI, and .39 for MSI-Dissatisfaction with Time Together) and IPV (r = .33 for perpetration and r = .44 for victimization).

Table 3. Correlations Among Intimate Relationship Dimensions

	1	2	3	4	5
1. Emotional Intimacy	1.00				
2. Partner Support	0.47	1.00			
3. Sexual Relationship Problems	-0.36	-0.41	1.00		
4. Affective Communication Problems	-0.63	-0.60	0.48	1.00	
5. Problem-Solving Deficits	-0.58	-0.48	0.38	0.62	1.00
6. DDC (Dehumanizing Deindividuation)	**-0.54**	**-0.50**	**0.37**	**0.55**	**0.58**

Note. Correlations between DDC (Dehumanizing Deindividuation in Couples) scores and measures of other relationship dimensions (bolded) were significant and moderate to large in size and in the expected directions.

The DDC also demonstrated incremental validity for explaining global relationship satisfaction controlling for the other relationship processes (Table 4). Given three highly related measures of satisfaction (*r*s ranged from |.56| to |.89|), we created a latent variable with QMI, CSI, and MSI-Dissatisfaction with Time Together scores modeled as indicators and regressed this latent factor on each of the relationship measures. Global model fit was adequate (CFI = .96, RMSEA = .092, SRMR = .031), factor loadings were large in magnitude and in the expected directions (-.64 to .94), and DDC scores were uniquely associated with lower global relationship satisfaction although the effect size was relatively small (β = -.09). In contrast, emotional intimacy had a large unique effect (β = .56); affective communication problems (β = -.24) and problem-solving deficits (β = -.09) were also uniquely associated with satisfaction.

Table 4. Incremental Validity in Sample 2 Predicting Latent Relationship Satisfaction

	b	SE	*p*	β
Latent Factor of Relationship Satisfaction				
QMI (Satisfaction)	1.00	-	-	0.94
CSI (Satisfaction)	0.54	0.02	0.000	0.94
MSI-TTO (Dissatisfaction)	-0.27	0.02	0.000	-0.64
Predictors of Latent Satisfaction Variable				
DDC (Dehumanizing Deindividuation)	**-0.65**	**0.30**	**0.028**	**-0.09**
Emotional Intimacy	**0.24**	**0.04**	**0.000**	**0.56**
Partner Support	0.02	0.03	0.506	0.02
Sexual Relationship Problems	-0.10	0.06	0.109	-0.06
Affective Communication Problems	**-0.50**	**0.11**	**0.000**	**-0.24**
Problem-Solving Deficits	**-0.11**	**0.05**	**0.027**	**-0.09**

Note. QMI = Quality of Marriage Index. CSI = Couples Satisfaction Inventory. MSI-TTO = Marital Satisfaction Inventory – Time Together. DDC = Dehumanizing Deindividuation in Couples. Significant paths are bolded.

The DDC also demonstrated incremental validity for explaining variance in IPV frequency. As reported in Table 5, DDC scores were uniquely associated with more frequent IPV perpetration and victimization, controlling for other relationship dimensions. The effect sizes were larger in this model, relative to the satisfaction model, with a small effect (β = .16) on

perpetration and a moderate effect (β = .31) on victimization. As anticipated, greater problem-solving deficits also emerged as a significant unique predictor of greater IPV risk.

Table 5. Incremental validity in Sample 2 Predicting IPV

	b	SE	*p*	β
IPV Perpetration				
DDC (Dehumanizing Deindividuation)	**0.44**	**0.19**	**0.025**	**0.16**
Emotional Intimacy	0.00	0.02	0.842	-0.02
Partner Support	-0.03	0.03	0.342	-0.08
Sexual Relationship Problems	-0.01	0.04	0.825	-0.01
Affective Communication Problems	-0.09	0.06	0.129	-0.11
Problem-Solving Deficits	**0.16**	**0.04**	**0.000**	**0.33**
IPV Victimization				
DDC (Dehumanizing Deindividuation)	**0.92**	**0.19**	**0.000**	**0.31**
Emotional Intimacy	0.01	0.01	0.553	0.05
Partner Support	-0.02	0.03	0.446	-0.06
Sexual Relationship Problems	-0.04	0.03	0.204	-0.06
Affective Communication Problems	-0.12	0.07	0.075	-0.14
Problem-Solving Deficits	**0.21**	**0.04**	**0.000**	**0.39**

Note. IPV = Intimate Partner Violence. DDC = Dehumanizing Deindividuation in Couples. Significant paths are bolded. The residuals of IPV perpetration and victimization were covaried. Significant paths are bolded.

Aim 5. Incremental prediction beyond general individuation in the couple relationship (Samples 1 and 2). The DDC had significant, large correlations with ICQ scores (-.64 in Sample #1 for dyadic DDC, -.53 for enacted DDC, and -.66 for received DDC; -.70 in Sample #2 for received DDC), providing evidence that dehumanizing deindividuation as measured with the DDC is closely (and inversely) related to individuation, but that the DDC and ICQ are not redundant according to a criterion of poor discriminant validity ($r < .80$). As reported in Tables 6 and 7, across samples, the DDC demonstrated significant unique associations with IPV perpetration and victimization, but not relationship satisfaction, when controlling for global individuation in the relationship (ICQ). This was regardless of whether the score was enacted only, received only, or the dyadic score. In contrast, individuation (ICQ)

demonstrated a unique effect of moderate to large size (βs ranged from .35 to .53 across S1 and S2) when explaining satisfaction but was not uniquely associated with IPV in either sample.

Table 6. Incremental Validity with ICQ: Sample 1

Model 1: Predicting Global Relationship Satisfaction			
	Received	*Enacted*	*Dyadic*
	β	β	β
DDC	0.06	-0.03	0.01
NPV	**0.10**	**0.17**	**0.13**
DIRRS	**-0.22**	**-0.22**	**-0.24**
ICQ	**0.53**	**0.48**	**0.48**
Model 2: Predicting IPV Perpetration and Victimization			
	Received	*Enacted*	*Dyadic*
	β	β	β
Perpetration			
DDC	**0.25**	**0.36**	**0.37**
NPV	-0.05	0.04	0.02
DIRRS	-0.02	0.13	0.08
ICQ	0.03	0.10	0.14
Victimization			
DDC	**0.25**	**0.31**	**0.34**
NPV	-0.10	-0.02	-0.04
DIRRS	0.13	0.18	0.18
ICQ	-0.01	-0.02	0.05

Note. * < .05. DDC = Dehumanizing Deindividuation in Couples. DIRRS = Dehumanization in Romantic Relationships Scale. NPV = Non-Physical Valuation. ICQ = Individuality in Couples Questionnaire. IPV = Intimate Partner Violence. Standardized effects are reported, and significant paths are bolded. Interrelations of enacted and received scores of DDC (r = .72), NPV (r = .83), and DIRRS (r = .72) were large so we created a dyadic level score for each measure (average of enacted and received) and examined incremental validity of those scores. Higher scores on NPV reflect *less* dehumanization whereas higher scores on the DDC and DIRRS reflect *more* dehumanization. The residuals of IPV perpetration and victimization were covaried in Model 2. DDC had a significant unique association with IPV perpetration and victimization, but not global relationship satisfaction, when controlling global individuation in the relationship.

Table 7. Incremental Validity with ICQ: Sample 2

	b	SE	*p*	β
Model 1: Relationship Satisfaction				
Latent Factor of Relationship Satisfaction				

QMI	1.00	-	-	0.94
CSI	0.55	0.02	0.000	0.95
MSI-TTO	-0.27	0.02	0.000	-0.64
Predictors of Latent Satisfaction Variable				
DDC	0.22	0.32	0.497	0.03
Emotional Intimacy	**0.18**	**0.04**	**0.000**	**0.43**
Partner Support	0.02	0.03	0.522	0.02
Sexual Relationship Problems	-0.07	0.05	0.223	-0.04
Affective Communication Problems	**-0.37**	**0.09**	**0.000**	**-0.18**
Problem-Solving Deficits	-0.07	0.05	0.120	-0.06
ICQ: Individuation	**3.69**	**0.72**	**0.000**	**0.35**
Model 2: IPV				
IPV Perpetration				
DDC	**0.49**	**0.22**	**0.026**	**0.18**
Emotional Intimacy	-0.01	0.02	0.603	-0.05
Partner Support	-0.03	0.03	0.340	-0.08
Sexual Relationship Problems	-0.01	0.04	0.887	-0.01
Affective Communication Problems	-0.08	0.06	0.186	-0.10
Problem-Solving Deficits	**0.16**	**0.04**	**0.000**	**0.34**
ICQ: Individuation	0.28	0.38	0.459	0.07
IPV Victimization				
DDC	**0.88**	**0.21**	**0.000**	**0.30**
Emotional Intimacy	0.01	0.02	0.627	0.04
Partner Support	-0.02	0.03	0.447	-0.06
Sexual Relationship Problems	-0.04	0.03	0.217	-0.06
Affective Communication Problems	-0.12	0.07	0.076	-0.14
Problem-Solving Deficits	**0.21**	**0.04**	**0.000**	**0.39**
ICQ: Individuation	-0.05	0.39	0.896	-0.01

Note. QMI = Quality of Marriage Index. CSI = Couples Satisfaction Inventory. MSI-TTO = Marital Satisfaction Inventory – Time Together. DDC = Dehumanizing Deindividuation in Couples. ICQ = Individuality in Couples Questionnaire. IPV = Intimate Partner Violence. Significant paths are bolded. The residuals of IPV perpetration and victimization were covaried. DDC had a significant unique association with IPV perpetration and victimization, but not global relationship satisfaction, when controlling for global individuation in the relationship.

Discussion

While dehumanization in intimate relationships may seem unlikely, recent research suggests that it does occur with concerning consequences (Brock et al., 2021; Calkins et al., 2023; Pizzirani et al., 2019; Pizzirani & Karantzas, 2019; Sáez et al., 2022; Zurbriggen et al.,

2011). The present work aimed to bridge dehumanization scholarship (Fredrickson & Roberts, 1997; Haslam, 2006; Kelman, 1973; Nussbaum, 1995) with recent research on individuality (Brock et al., 2023; see also Ainsworth, 1969; Bowen, 1993; Bowlby, 1988; Minuchin, 1985) and dehumanization in couples (e.g., Calkins et al., 2023; Karantzas et al., 2023; Meltzer & McNulty, 2014; Zurbriggen, et al., 2011) and examine the psychometric properties and validity of the *Dehumanizing Deindividuation in Couples (DDC) scale.* We rigorously examined the DDC scale's psychometric properties (Aim 1), developed a corresponding measure of *enacted* DDC (Aim 2), and tested the DDC scale's validity (including received, enacted, and dyadic versions) in relation to existing measures of couple dehumanization and relationship processes (Aims 3-5). The findings demonstrate strong psychometric properties of the DDC scale.

In Aim 1, we replicated the unidimensional factor structure of the DDC (Brock et al., 2023) in an independent sample of students in committed relationships (Sample 1), resolved issues with redundant items, and computed an internally consistent and highly replicable composite of 10 items. The original DDC captured someone's perception of dehumanizing deindividuation directed at them by their partner (*received*); however, dehumanization can be reciprocal in nature (Bustillos et al., 2023). Therefore, in Aim 2, we created a parallel form for assessing *enacted* DDC toward partner which also demonstrated unidimensional structure, good internal consistency, and high replicability. Scores on the received and enacted versions of the DDC were highly correlated, suggesting that dehumanizing deindividuation may be a dyadic phenomenon (i.e., if someone is being dehumanized in this way, they are likely doing the same to their partner), although this requires closer attention in future research. This was also consistent with the pattern of correlations across enacted and received scores of dehumanization on the NPV and DIRRS scales. We examined received and enacted scores separately, but given the potential to alter the construct validity of scores in the context of high inter-dyad correlations (Smith et al., 2022), we also created composites (mean across enacted and received) reflecting DDC, NPV, and DIRRS at the dyadic level.

In Aim 3, we investigated the validity of DDC scores in the context of other measures of

dehumanization in couples. Results suggest that the DDC converges with other measures (i.e., NPV and DIRRS), but also appears to tap into a unique form of dehumanization marked by deindividuating behaviors in this specific relational context. Indicating strong criterion validity, the DDC was associated with lower global relationship satisfaction and more frequent IPV. Regarding incremental validity, the three dimensions of dehumanization in couples (DDC, NPV, and DIRRS) were uniquely associated with satisfaction, including the received, enacted, and dyadic versions of the scale; however, only the DDC was uniquely associated with IPV (perpetration and victimization). Thus, the DDC might be particularly informative for explaining risk for IPV relative to other forms of couple dehumanization. It is possible that the concrete behaviors represented on the DDC, rather than more trait-like, abstract items on the NPV and DIRRS better capture dehumanizing processes in the relationship that pave the way for violence.

In Aim 4, we conducted secondary data analysis in a community sample of coupled individuals (Sample 2) and investigated the validity of DDC. Results suggest that the DDC converges with other measures of relationship quality (i.e., intimacy, support, sexual quality, affective communication, problem-solving communication), but also represents a unique dimension of the relationship. Indicating strong criterion validity, the DDC was significantly associated with lower global relationship satisfaction and more frequent IPV perpetration and victimization. Regarding incremental validity, the DDC was uniquely associated with lower relationship satisfaction and more pervasive IPV, even when controlling for other relationship processes, although it is notable the effect sizes were larger for IPV than relationship satisfaction. This is consistent with emerging research suggesting that dehumanization processes in couples might be especially pertinent to understanding IPV risk (e.g., Sáenz & Haslam, 2024).

Finally, in Aim 5, to determine if this new measure demonstrates incremental validity beyond a measure of individuality in couples (ICQ, Brock et al., 2023), we retested the models in Aims 3 and 4 adding ICQ scores as a covariate. A similar pattern emerged across samples. Specifically, when controlling for individuation in the relationship, other measures of dehumanization (Sample 1), and intimate relationship processes (Sample 2), the DDC was

uniquely associated with IPV. In contrast, the DDC was not uniquely related to global relationship dissatisfaction whereas respect for partner's individuality (e.g., asking opinions, praising accomplishments, encouraging personal space) was a robust predictor of satisfaction.

Theoretical Implications

This study adds to a small, but growing set of studies (Pizzirani et al., 2019; Sáez et al., 2022; Zurbriggen et al., 2011) suggesting that dehumanization occurs in intimate relationships, not just intergroup or other interpersonal contexts. The current study extended the consideration of dehumanization to (de)individuation—a concept central to dehumanization theory (Kelman, 1973) and recent couples research (Brock et al., 2023). We propose that failing to recognize a partner as a unique human being with inherent worth (see Kelman, 1973) or denying a partner individuality and community can manifest in derogation (e.g., contempt, Giner-Sorolla et al., 2023; Harris & Fiske, 2006; Karantzas et al., 2023), disregard (e.g., indifference and invisibility, Golossenko et al., 2023; Talmon & Ginzburg, 2016), and denial of autonomy (Golossenko et al., 2023; Nussbaum, 1995; Talmon & Ginzburg, 2016). Although these features of dehumanization have been identified in the broader dehumanization literature, their application to couples is relatively novel. This work also highlights that dehumanization in couples can be both mundane and subtle—such as bossiness toward a partner (e.g., the DDC) or failing to value a partner's humor or intellect (Meltzer & McNulty, 2014), but also overt and extreme—including likening a partner to a machine or animal (Pizzirani et al., 2019) or engaging in sexual coercion or even violence (Pizzirani & Karantzas, 2019; Sáez et al., 2019).

This work also advances literature on reciprocal dehumanization (Bustillos et al., 2023; Strelan & Pagoudis, 2018), by demonstrating a strong correlation between experienced and enacted dehumanization. Past research usually assesses the enactment and receipt of dehumanization separately (Brock et al., 2021; Meltzer & McNulty, 2014; Pizzirani et al., 2019). Mirroring others (Meltzer & McNulty, 2014; Pizzirani et al., 2019), we created an enacted dehumanization measure to complement the experienced dehumanization measure from Brock et al. (2023). Our findings point to the potential of a bidirectional dyadic process, rather than a one-

sided dynamic. Interestingly, strong correlations between enacted and received dehumanization also emerged on the NPV and the DIRRS. However, future dyadic research with reports from both partners is needed. Additionally, while researchers could use the received or enacted measures separately in their research (e.g., depending on the research question), we urge researchers to exercise caution. Received and enacted scores should not be modeled simultaneously as predictors if they are closely related given multicollinearity concerns and the potential to remove the relational process of interest (Smith et al., 2022). Further, if researchers only measure received dehumanization, they should be aware that the measure may also reflect enacted dehumanization (or vice versa) and contextualize their findings through this potentially reciprocal process. Together, these initial results support models of reciprocal dehumanization (Bustillos et al., 2023; Strelan & Pagoudis, 2018) and underscore the importance of considering this phenomenon within intimate relationships, where reciprocal dehumanization may be especially likely, given the close, intimate contact that intimate partners share.

Dehumanizing deindividuation also significantly predicts key relationship outcomes including global satisfaction and IPV. Previous research has linked dehumanization of outgroups to severe outcomes such as genocide and discrimination (Loughnan et al., 2021). This paper extends these findings to intimate relationships, showing that more dehumanizing deindividuation was associated with more frequent IPV (see also Pizzirani & Karantzas, 2019; Saez et al., 2022). Furthermore, dehumanization undermines affiliation and belonging with others (Haslam, 2022), and our findings reveal that it also erodes relationship satisfaction in couples. It is notable that dehumanizing deindividuation uniquely predicts these outcomes, even when controlling for other measures of couple dehumanization (e.g., the NPV and DIRRS). In fact, the DDC was the only dehumanization measure that was uniquely associated with IPV, suggesting that it could hold considerable promise for understanding IPV risk. This greater explanatory power may be due to the less extreme, concrete dehumanizing behaviors reflected on the DDC compared to other measures. These behaviors might be more relatable to participants and, when pervasive in the relationship, confer risk for aggression.

Finally, this work suggests that dehumanization theorists should refine their models to incorporate the role of deindividuation. While Kelman (1973) linked the denial of individuality to dehumanization a half a century ago, empirical support for this connection has been limited (Spears, 2016). In the couples literature, individuation has been recognized as critical to relationship functioning, but robust, comprehensive measures have only recently been introduced and validated (e.g., Brock et al., 2023). Our findings indicate that a lack of individuation is related to, but distinct from, dehumanizing deindividuation. Although scores on the ICQ and DDC scale were negatively correlated, the DDC remained a significant predictor of IPV, even when controlling for the ICQ Interestingly, the DDC no longer predicted relationship satisfaction after accounting for ICQ. This suggests that failing to recognize a partner's individuality (e.g., omissions such as not valuing partner's opinions or not encouraging personal space) may differ from actively dehumanizing (e.g., acts of commission such as treating partner as a child, acting superior to partner, or ignoring partner), and that dehumanizing deindividuation may be a better predictor of dysfunction compared to positive relationship functioning.

Practical and Clinical Implications

Results provide strong empirical evidence for the use of the DDC scale, demonstrating robust psychometric properties. The DDC scale fills a gap in existing measures of dehumanization in couples, which have primarily focused on couples' valuation of physical relative to non-physical traits (Meltzer & McNulty, 2014) and the attribution of human uniqueness and human nature traits (Pizzirani et al., 2019). Given the significant but moderate relations between the DDC and other dehumanization measures, and incremental validity of these measures for explaining relationship discord, we urge researchers to include multiple measures of couple dehumanization in their studies—a practice that is currently rare. If using multiple measures proves impractical, researchers should carefully consider the specific elements of dehumanization they wish to assess. One element that differentiates the DDC from other measures, is its description of concrete behaviors (e.g., being talked over; being bossed around), rather than trait-like and abstract (de)humanizing perceptions of the partner (the sense that a

partner does not value one's intellect; general treatment as exploitable or immature).

Limitations and Future Directions

While this work has several strengths and major theoretical and practical implications, it is not without some limitations. First, our samples contained primarily White, cisgender, and heterosexual individuals in couples. Societal dehumanization experiences are notably higher in racial and ethnic minorities (Kteily et al., 2015), transgender and non-binary individuals, and sexual minorities (Moradi, 2013). It is possible that experienced and enacted dehumanization may be even higher in people with marginalized identities. However, work with greater inclusion of people from underrepresented groups is necessary to examine these possibilities. Relatedly, we included two samples of relatively high functioning couples. Dehumanization may be higher in couples experiencing high levels of discord such as those with a history of severe IPV.

Additionally, data were cross-sectional, so temporal ordering of effects are unclear. It is possible that more dehumanizing deindividuation predicts more IPV or less relationship satisfaction, but it is also possible that people in more discordant relationships subsequently see their partner as less human. This possibility also aligns with recent considerations of dehumanization; scholars have noted that dehumanization may be both a precursor to, but also a subsequent justification of violence (Vaes et al., 2021).

Finally, research is needed to further examine the role of dislike in DDC, given theoretical concerns in the dehumanization literature (Vaes et al., 2021). Like Karantzas et al. (2023), we agree that "many (but not all) negative relationship behaviors reflect the perpetration of dehumanization" (p. 502). Items on the DDC specifically reflect common couple behaviors involving denial of autonomy, derogation, and disregard. While scores on the DDC were positively associated with other forms of dehumanization in the couples (e.g., the DIRRS, NPV), future research could further examine whether deindividuating treatment stems from perceptual processes involving denial of human traits to one's partner.

Concluding Thoughts

At first blush, dehumanization in couples may seem completely absent or exceedingly

rare. However, with our novel incorporation of (de)individuation in couples, and a robust psychometric assessment of the *Dehumanizing Deindividuation in Couples* (DDC) scale (see supplemental materials for enacted and received versions of the DDC which are free to use), we find that dehumanization occurs in intimate relationships, and when present, it can significantly undermine intimate relationships above and beyond other indicators of dehumanization and relational processes. While an important first step in this line of research, we hope that other researchers will adopt the DDC scale, especially given its strong psychometric properties and validity, to better understand its role in dehumanization in couples.

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