

ECHOES OF OUR UPBRINGING: HOW GROWING UP WEALTHY OR POOR RELATES TO NARCISSISM, LEADER BEHAVIOR, AND LEADER EFFECTIVENESS

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We investigate how parental income during an individual's upbringing relates to his or her effectiveness as a leader after entering an organization. Drawing on research on the psychological effects of income, social learning theory, and the integrative trait-behavioral model of leadership effectiveness, we propose a negative, serially mediated association between higher parental income and lower future leader effectiveness via high levels of narcissism and, in turn, reduced engagement in behaviors that are viewed as central to the leadership role. We test our model using multisource data collected from active soldiers in the United States Army. Results reveal that parental income exerts indirect effects on leadership effectiveness criteria because (a) parental income is positively related to narcissism as an adult, (b) narcissism relates negatively to engaging in task-, relational-, and change-oriented leadership behaviors, and (c) reduced engagement in these behaviors relates to lower leader effectiveness. Our investigation advances theory by identifying pathways through which parental income relates to the effectiveness of leaders in organizations, and by illuminating the origins of a trait—narcissism—that predicts the behavior and effectiveness of leaders.

The income disparity between the “haves” and “have nots” is greater now than it has been at any time since the Great Depression of the 1930s (Piketty & Saez, 2014). As a result of high inequality, children spend their formative years in vastly different resource environments. Some children grow up in resource-rich environments; others, in poverty (Evans, 2004; McLoyd, 1998). Sociological and psychological research indicates that these differences matter—parental income has important consequences for people's lives. In past research, individuals with

higher-income parents exhibited better health and lower mortality rates (Chen, Matthews, & Boyce, 2002; Duncan, Ziol-Guest, & Kalil, 2010), but were often less generous (Miller, Kahle, & Hastings, 2015) than individuals with lower-income parents.

This disciplinary research suggests an interesting possibility that has so far received little attention in the management literature: Growing up in a rich or poor environment may have implications for how people interact in organizations (Côté, 2011; Gray & Kish-Gephart, 2013; Leana & Meuris, 2015). In particular, parental income may be particularly important for leadership, given its relational nature (Bryman, 1999). Even so, we do not know whether or how parental income relates to leadership behaviors and effectiveness. Leadership theories have neglected the role of parental income (Côté, 2011; Leana & Meuris, 2015), compared to other individual differences such as personality traits and abilities, which have received much more attention (DeRue, Nahrgang, Wellman, & Humphrey, 2011; Judge, Bono, Ilies, & Gerhardt, 2002). Moreover, while there is growing

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evidence from psychological research that parental income shapes thinking and action (cf. Chen, Zhu, & Chen, 2013; Duncan et al., 2010; Miller et al., 2015; Piff, 2014), these studies were conducted outside of organizations and did not examine the leadership process.

Examining whether parental income shapes the behavior and effectiveness of leaders is important. The growing gap between the “haves” and “have nots” suggests that people with very different resource backgrounds are entering the workforce. This is likely consequential, because these different backgrounds might influence their behaviors and subsequent effectiveness as leaders. As such, variation in parental income raises questions about how organizations can manage and leverage differences among people in ways that are productive for organizations and fair to members. To address this challenge, we must understand how people from different economic strata lead others.

Here, we develop and test theory about how parental income relates to the behavior and effectiveness of leaders. In developing our theory, we integrate research on the psychological consequences of income—particularly the self-sufficiency hypothesis (Miller et al., 2015; Piff, 2014; Vohs, Mead, & Goode, 2006), social learning theory (Bandura, 1977), and the leadership behavior paradigm (Bass & Stogdill, 1990; Judge, Piccolo, & Ilies, 2004). As a framework, we adopt the integrative trait-behavioral model of leadership effectiveness (DeRue et al., 2011), which posits that stable individual differences influence leaders’ behaviors, and in turn these behaviors relate to multiple dimensions of leader effectiveness. We propose that growing up with higher-income parents facilitates the development of higher levels of narcissism, and that, in ongoing leader–follower relationships, higher levels of narcissism are associated with less engagement in relational-, task-, and change-oriented behavior among leaders. In turn, leaders who are perceived to engage in fewer of these behaviors are rated by followers as less effective, and the followers in the units they lead engage in fewer citizenship and more counterproductive behaviors. These relationships are tested in the field among actively engaged leaders and followers, and using a multisource survey and archival data.

This investigation makes three theoretical contributions. First, it joins emerging research on the psychological consequences of income (Miller et al., 2015; Piff, 2014; Vohs et al., 2006) with research on leadership effectiveness (DeRue et al., 2011; Yukl, 2011), two areas that have yet to be integrated. Using insights from social learning theory that people acquire values and

develop behavioral patterns by observing and interacting with important role models, including their parents (Bandura, 1977), we test whether parental income relates to leaders’ future behaviors and effectiveness. We focus on parental income rather than the broad construct of social class because theory and evidence suggest that the different facets of social class (income, education, and occupation prestige) have distinct—and, in some cases, opposite—effects (Ariely & Mann, 2013; Longest, Hitlin, & Vaisey, 2013; Trautmann, van de Kuilen, & Zeckhauser, 2013).

Second, our investigation contributes to our understanding of leadership by extending the integrative trait-behavioral model of leadership effectiveness (DeRue et al., 2011) and further exploring the related roles of parental income and narcissism in leadership as a process. The trait-behavioral model of leadership effectiveness is largely silent on how leaders acquire influential traits and tendencies. We identify a factor that sets the process described in the model in motion. We examine parental income as an antecedent factor that relates to the trait of narcissism and, in turn, leader behavior and leader effectiveness. Moreover, prior work has explored more broadly how the material background of one’s childhood (Kish-Gephart & Campbell, 2015) or levels of narcissism (Chatterjee & Hambrick, 2007) influence the strategic decisions that leaders make. This work, however, has not explored how these factors influence leadership as a social process involving enduring relationships and influence between leaders and followers (Yukl, 2011).

Finally, this study brings research regarding the psychological consequences of growing up in high-versus low-income conditions to the organizational context. Past studies on parental income were conducted outside of organizational contexts, often with participants who were students, children, or online respondents (Chen et al., 2013; Miller et al., 2015; Piff, 2014). Our research investigates associations between parental income and individuals’ behavior after they enter organizations and attain positions of leadership many years later, and thus tests whether parental income relates to behavior in a dynamic organizational setting where competing influences may limit its effects.

PARENTAL INCOME, NARCISSISM, AND LEADERSHIP BEHAVIORS

Parental Income and Narcissism

Drawing from past theory and research on the psychological consequences of income, we argue that—all

else equal—higher parental income is associated with higher levels of narcissism in adulthood than lower parental income. Narcissism is characterized by grandiose self-views, impulsiveness, reduced empathy, beliefs that one deserves special treatment, strong feelings of uniqueness, and a dominant orientation toward others (Campbell & Campbell, 2009; Emmons, 1989; Leary, Bednarski, Hammon, & Duncan, 1997; Vazire & Funder, 2006). Individuals low in narcissism simply have more realistic self-views, rather than having negative self-views or low confidence or self-esteem.

Social learning theory posits that people acquire behavioral patterns through observation and reinforcement by influential others, including parents (Bandura, 1977). According to this theory, parents model certain behaviors that children reproduce because they consider these behaviors to be appropriate and desirable. Parents also influence their children by reinforcing some behaviors through rewards and encouragement, and discouraging other behaviors through punishment. Which behaviors parents model and encourage likely depends on their income, because the basic life conditions of higher- and lower-income parents differ in fundamental ways (Miller et al., 2015).

Research regarding the psychological consequences of income suggest a self-sufficiency hypothesis, positing that high income allows individuals to procure the goods and services that are required to meet personal needs, thereby reducing dependency and increasing separation from others (Côté, Piff, & Willer, 2013; Piff, 2014; Vohs et al., 2006). Higher-income parents own larger houses in safer neighborhoods, have more reliable transportation (e.g., vehicles) to shuttle children to various activities, and can pay for more activities, such as lessons, camps, or tutors (Evans, 2004; McLoyd, 1998). These conditions lead higher-income parents to feel highly independent and perceive little need for others' assistance.

By contrast, lower-income parents have smaller houses in more dangerous neighborhoods and rely more on time-consuming and unreliable public transportation. These conditions cause lower-income parents to perceive that they struggle to meet their needs on their own, and increase their dependence on others for access to resources (e.g., transportation, childcare) to meet their basic needs. This dependence, in turn, increases closeness to others among lower-income individuals.

In support of these self-sufficiency arguments, activating thoughts about money—the most common form of income (Wang & Murnighan, 2014)—causes

various manifestations of independence and separation from others, including higher persistence and reluctance to ask others for help when working on difficult tasks (Vohs et al., 2006), less distress due to social rejection by others (Zhou, Vohs, & Baumeister, 2009), less socializing with others (Mogilner, 2010), and reduced perceived purpose in life among parents while interacting with children (Kushlev, Dunn, & Ashton-James, 2012).

Independence from others, in turn, might create tenuous relationships between higher-income parents and others—relationships that are characterized by more self-serving behavior and less sensitivity to others' needs. Studies on the correlates of income, some of which were conducted as part of multistudy investigations of the correlates of the broader construct of social class, have shown that higher-income individuals feel less compassion and are less helpful to a stranger in need than lower-income individuals (Côté et al., 2013; Piff, Kraus, Côté, Cheng, & Keltner, 2010). Higher income—but not higher education—is also associated with increased unethical behavior performed to benefit the self (Dubois, Rucker, & Galinsky, 2015). A 35-year (1976–2010) societal-level analysis revealed that adolescents in the United States reported lower concern for others during times of economic prosperity than during times of economic deprivation (Park, Twenge, & Greenfield, 2014). Priming money has similar effects: money primes reduce helpful behavior (Vohs et al., 2006) and increase unethical behavior performed to benefit the self (Gino & Mogilner, 2014; Kouchaki, Smith-Crowe, Brief, & Sousa, 2013).

These findings suggest that higher-income parents model and reinforce behaviors prioritizing the self over others. Integrating insights from social learning theory and the self-sufficiency hypothesis suggests that, through mimicry and reinforcement, higher-income parents transmit more self-serving behavior to their children than lower-income parents. Supporting this reasoning, in past research, four-year-old children of higher-income parents donated fewer stickers to friends and fewer prize tokens to sick children than did children of poorer parents (Chen et al., 2013; Miller et al., 2015).

The behaviors inculcated by higher-income parents are likely to increase children's narcissism, because behaviors prioritizing the self over others are likely to crystallize over time. Past studies conducted outside of organizations provide indirect support for our prediction that higher parental income is associated with narcissism. In these studies, feeling wealthy (Piff, 2014), self-identifying as rich (Cai, Kwan, &

Sedikides, 2012), and having higher income (Foster et al., 2003) were associated with higher narcissism.

Importantly, narcissism established in youth tends to persist beyond childhood. A 20-year longitudinal study using observer-based measures of narcissism found that narcissism identified in preschool-aged children tended to remain through adolescence and early adulthood (Carlson & Gjerde, 2009). This suggests that narcissistic tendencies learned early in life will persist and influence how people act as adults. Thus:

Hypothesis 1. Parental income is positively related to future narcissism.

Narcissism and Leadership Behaviors

We propose that higher levels of narcissism are associated with less engagement in three broad facets of leadership behavior specified by the trait-behavioral model: relational-, task-, and change-oriented leadership behavior (DeRue et al., 2011). Meta-analytic research shows that engaging in these behaviors is associated with multiple dimensions of leader effectiveness (DeRue et al., 2011; Judge, Piccolo, & Ilies, 2004).

Research has identified both benefits and costs of narcissism, which has been linked to well-being (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004) as well as depression (Miller, Campbell, & Pilkonis, 2007); successful (Wallace & Baumeister, 2002) as well as poor task performance (Campbell, Goodie, & Foster, 2004); and relationship success (Oltmanns, Friedman, Fiedler, & Turkheimer, 2004) as well as relationship failure (Campbell & Foster, 2002). These seemingly contradictory findings have been reconciled by considering the stage of relationships and frequency of interactions between narcissists and others (Back, Schmukle, & Egloff, 2010; Campbell & Campbell, 2009; Carlson & DesJardins, 2015; Paulhus, 1998; Robins & Beer, 2001). In particular, in the early stages of relationships—referred to as the “emerging zone”—or in relationships that feature infrequent interactions, the positive qualities of narcissists, such as their confidence, are especially salient. By contrast, in relationships that enter the “enduring zone”—characterized by ongoing interactions between narcissists and others—the negative attributes and behavioral tendencies of narcissists are more impactful.

In support for these arguments, in one study, narcissists were rated positively after a single meeting with new group members, and negatively after working with peers for seven weeks (Paulhus, 1998).

In another study, narcissistic group members were initially popular because they seemed dominant and confident, but their popularity decreased sharply over time because they acted in increasingly arrogant and aggressive ways, and their peers became less tolerant of these behaviors (Leckelt, Küfner, Nestler, & Back, 2015). Concerning leadership, narcissists tend to garner status and emerge as leaders in the early stages of group work (Brunell, Gentry, Campbell, Hoffman, Kuhnert, & DeMarree, 2008; Nevicka, De Hoogh, Van Vianen, Beersma, & McIlwain, 2011). Moreover, narcissistic leaders are rated positively on some dimensions by observers with whom they rarely or never interact. For instance, narcissistic U.S. presidents are rated highly by historians on certain indices of effectiveness (Watts et al., 2013). However, when leaders interact frequently with their group members over long periods of time, higher narcissism is negatively associated with communication within the group and the group’s performance (Nevicka, Ten Velden, De Hoogh, & Van Vianen, 2011).

Drawing from past theory and findings, we posit that, in organizational contexts where leaders and followers have enduring relationships, higher narcissism will relate to lower engagement in relational-, task-, and change-oriented leadership behaviors.

Narcissism and relational-oriented behaviors. Relational-oriented behaviors are actions in which leaders show concern for followers, look out for their welfare, build their respect, and encourage followers to focus on the welfare of the group (DeRue et al., 2011). In enduring relationships, grandiosity—a defining characteristic of narcissism—might cause narcissists to act in ways that are less interpersonally sensitive than non-narcissists, because, when individuals believe that they are more important and worthy than others, they might over-claim credit and deny others the appreciation or recognition they deserve (Campbell, Reeder, Sedikides, & Elliot, 2000; Farwell & Wohlwend-Lloyd, 1998). Narcissists also tend to derogate others in order to rate their own traits more favorably (Park & Colvin, 2015). Impulsivity—another defining facet of narcissism—causes narcissists to be arrogant (Emmons, 1989) and aggressive (Hogan, Curphy, & Hogan, 1994), and to belittle others and exploit their weaknesses (Raskin & Terry, 1988; House & Howell, 1992).

In past studies, narcissists exhibited low levels of empathy (Morf & Rhodewalt, 2001; Watson, Grisham, Trotter, & Biderman, 1984) and low interest in establishing and maintaining warm interpersonal relationships (Emmons, 1989). These tendencies should lead narcissistic leaders to show little concern for

their followers. Thus, narcissism should negatively relate to relational-oriented leadership behavior.

Narcissism and task-oriented behaviors. Task-oriented behaviors reflect the extent to which a leader defines and organizes the work and roles of members, models and asks that others follow standard rules and regulation, establishes well-defined patterns and channels of communication, and rewards meeting expectations (DeRue et al., 2011; Bass & Stogdill, 1990). The grandiosity and impulsivity that are hallmarks of narcissism are likely to stifle engagement in task-oriented leadership behaviors in enduring relationships between leaders and followers.

Impulsivity motivates narcissists' toward behaviors that provide temporary gratification of their desires for recognition, often at the cost of long-term success (Campbell, Bush, Brunell, & Shelton, 2005; Raskin & Terry, 1988). Narcissists are less deliberative and conscientious (Vazire & Funder, 2006), which should impede their capacity to define and organize work and roles. Narcissistic leaders' impulsivity may cause them to deviate from established plans and standards, causing confusion among followers about what to do. Moreover, narcissists' grandiose sense of self, combined with their tendency to derogate others (Carlson & DesJardins, 2015; Park & Colvin, 2015), should make it less likely that narcissistic leaders delegate tasks to others, potentially believing that they, and only they, are capable of accomplishing tasks and less likely that they consistently reward followers' good behaviors. These arguments suggest that, in enduring relationships where narcissists engage in more negative behavior (Leckelt et al., 2015), they will be less conscientious in structuring tasks, more likely to deviate from plans, and more focused on short-term motives for recognition than long-term systems, resulting in less task-oriented leadership behavior.

In support of these arguments, prior work has found that the levels of narcissism of CEOs of sports organizations were negatively associated with ratings of their contingent-reward leadership, a set of behaviors encompassed by task-oriented leadership behavior (Resick, Whitman, Weingarden, & Hiller, 2009). Narcissists' grandiose self-importance and tendencies to derogate others might obfuscate rather than clarify for followers what behaviors are valued and appropriate, inhibit communication within the team, and limit the extent to which they delegate tasks to others. These arguments suggest that leader narcissism will negatively relate to engaging in task-oriented behaviors.

Narcissism and change-oriented behaviors. Change-oriented leadership behaviors are those that develop and communicate a compelling vision, and

encourage followers' innovative thinking and the sharing of different perspectives. This dimension of behavior is conceptually based in transformational leadership research, particularly the dimensions of intellectual stimulation and inspirational motivation (DeRue et al., 2011).

There are competing arguments concerning narcissistic leaders' abilities to formulate and garner a compelling vision (Resick et al., 2009; Rosenthal & Pittinsky, 2006). On the one hand, narcissistic leaders might take more risks, helping them develop creative ideas that make their vision compelling. On the other hand, narcissistic leaders' focus on their own goals and priorities may cause them to articulate visions that omit the goals of their organization and, thus, should fail to attract followers' commitment (Bass & Steidlmeier, 1999; Popper, 2002; Resick et al., 2009). To wit, House and Howell (1992) argued that narcissism is a key attribute distinguishing leaders who use their power to benefit the self versus the collective, a pattern that is more effective in modern organizations. Empirical findings about the relation between narcissism and change-oriented behaviors are also mixed. Narcissistic U.S. presidents received higher scores from historians on persuasiveness and agenda setting (Watts et al., 2013). But, in another study, ratings of transformational leadership behavior of narcissistic and non-narcissistic sport CEOs were comparable (Resick et al., 2009). In other work, narcissistic leaders produced visions that were bold but failed to consider the organization; these effects canceled each other out, so that leader narcissism was not correlated with charismatic leadership ratings (Galvin, Waldman, & Balthazard, 2010).

There are clearer theoretical arguments and findings suggesting that narcissistic leaders will encourage less innovative thinking and sharing of perspectives among group members, the other central aspects of change-oriented leadership behavior (DeRue et al., 2011). Narcissists perceive and seek to show that they are smarter and more capable than others (Wallace & Baumeister, 2002). Self-aggrandizing leader behaviors may evoke obedience in some, but can also stifle followers' self-initiative and reduce their desire to associate with the leader (House & Howell, 1992). Narcissists' combination of felt superiority and impulsivity can make them aggressive communicators (Hogan et al., 1994; Paulhus, 1998). Aggressive leadership behaviors discourage followers from speaking up with ideas (Burriss, Detert, & Chiaburu, 2008). Narcissists are also resistant to and defensive about feedback (Barry, Chaplin, & Grafeman, 2006; Martinez, Zeichner, Reidy, & Miller, 2008). Defensiveness has been negatively linked to seeking

new ideas or making improvement-oriented suggestions (Fast, Burris, & Bartel, 2014). In support of these assertions, prior work suggests that narcissistic leaders inhibit information exchange within groups, which in turn reduces group performance (Nevicka, Ten Velden, et al., 2011). These arguments suggest that, in enduring leader–follower relationships, narcissistic leaders are less likely to engage in collective-focused behaviors that encourage innovative thinking or the sharing of improvement-oriented ideas, compared to leaders with lower levels of narcissism.

In sum, while there is mixed evidence of narcissists' abilities to create intellectually stimulating visions, narcissism should make leaders less effective at engaging in change-oriented behaviors because their visions are prone to being self-serving and their interpersonal style is likely to discourage the sharing of ideas and perspectives. We therefore expect:

Hypothesis 2. Narcissism is negatively related to leader engagement in (a) relational-, (b) task-, and (c) change-oriented behaviors.

Leadership Behaviors and Leader Effectiveness

We posit that relational-, task-, and change-oriented leadership behaviors relate to multiple dimensions of effectiveness. Given that prior research has theoretically and meta-analytically articulated and found these links (Brown & Treviño, 2006; DeRue et al., 2011; Holtz & Harold, 2013; Judge, LePine, & Rich, 2006; Judge, Piccolo, & Ilies, 2004; Judge & Piccolo, 2004; Lambert, Tepper, Carr, Holt, & Barelka, 2012; LePine, Erez, & Johnson, 2002; Piccolo & Colquitt, 2006), we briefly describe prior work and theoretically justify these relationships below. We then describe how these relationships are part of serial mediational chains involving parental income and narcissism.

We expect that engagement in the aforementioned leadership behaviors relates to leaders' effectiveness as rated by their followers and two workgroup behaviors concerned with followers' engagement in helpful and harmful behaviors in their units. We chose these dimensions because several models construe leader effectiveness as multifaceted (DeRue et al., 2011; Yukl, 2011), and it was thus important to cover content across different dimensions of effectiveness. Moreover, the third author, a 20+-year member of the host organization, identified these indices as aligning with organizational objectives.

Leadership behaviors and follower-rated effectiveness. Relational- and change-oriented behaviors create healthy communication, good interpersonal

dynamics, an open environment for improvement-oriented ideas within a team, and early identification of opportunities for improvement (e.g., Detert & Burris, 2007). Additionally, clearly structuring tasks can direct effort, lead to more efficient functioning, and boost performance outcomes (Keller, 2006). Thus, we predict:

Hypothesis 3. Leaders' engagement in (a) relational-, (b) task-, and (c) change-oriented behavior is positively related to follower perceptions of leader effectiveness.

Leader behaviors and work group behaviors.

Drawing from social learning theory, we propose that leaders who engage in more relational-, task-, and change-oriented behaviors will role model and create conditions that foster more citizenship and less counterproductive behavior among followers. "Citizenship behaviors" are actions concerned with helping others, going above and beyond, and taking more responsibilities (Smith, Organ, & Near, 1983). Relational-oriented behaviors develop supportive relationships with subordinates that increase followers' satisfaction with the work and builds strong reciprocal relationships, which are antecedents of citizenship behaviors (Judge, Piccolo, & Ilies, 2004; Lambert et al., 2012; Lee & Allen, 2002). In addition, change-oriented leadership encourages extra-role behaviors such as sharing ideas and helping the collective (Detert & Burris, 2007; Piccolo & Colquitt, 2006). Finally, clearly structuring work is helpful to followers, and taking the time to do so establishes a norm for helping others, which is related to citizenship (Neubert, Michele, Carlson, Chonko, & Roberts, 2008; Schnake, Cochran, & Dumler, 1995).

Counterproductive behaviors are those that violate organizational norms and are harmful to organizational interests (Bennett & Robinson, 2000; Dalal, 2005). When leaders engage in relational-oriented behaviors that are just and supportive, followers' motivation to harm the group or inhibit performance should be less, as counterproductive behavior is often a response to perceived injustice or poor treatment (Dalal, 2005). By engaging in task-oriented behaviors, leaders set clear guidelines about what is to be done and how it should be accomplished (Bass & Stogdill, 1990), direct effort, and establish rewards for staying on task and consequences for deviating. This sends clear signals that behaviors hindering the group are unacceptable, and also establishes clear rewards for desirable behaviors (Holtz & Harold, 2013; Neubert et al., 2008). Lastly, change-oriented behaviors encourage followers to transcend their

self-interest and act in the interest of the collective (Burns, 1978). Behaviors that harm the group are inconsistent with that norm (Brown & Treviño, 2006; Judge et al., 2006). We thus expect:

Hypothesis 4. Leaders' engagement in (a) relational-, (b) task-, and (c) change-oriented behavior is positively related to citizenship behaviors within their units.

Hypothesis 5. Leaders' engagement (a) relational-, (b) task-, and (c) change-oriented behavior is negatively related to counterproductive behaviors within their units.

Mediated Effects of Parental Income on Leader Effectiveness

In the previous hypotheses, we posit that parental income relates to the extent to which leaders are narcissistic, levels of narcissism negatively relate to engagement in relational-, task, and change-oriented behaviors, and, in turn, these behaviors are positively associated with multiple criteria of leadership effectiveness. Combining these hypotheses, we expect serial mediation such that negative associations between parental income and leadership effectiveness are transmitted via high levels of narcissism and subsequently reduced engagement in the three dimensions of leadership behavior.

Hypothesis 6. The relationship between parental income and perceived leader effectiveness is serially mediated by narcissism and engagement in (a) relational-, (b) task-, and (c) change-oriented leadership behaviors.

Hypothesis 7. The relationship between parental income and followers' engagement in citizenship behaviors is serially mediated by narcissism and engagement in (a) relational-, (b) task-, and (c) change-oriented leadership behaviors.

Hypothesis 8. The relationship between parental income and followers' engagement in counterproductive behaviors is serially mediated by narcissism and engagement in (a) relational-, (b) task-, and (c) change-oriented leadership behaviors.

METHODOLOGY

Sample and Design

We employed a multisource, cross-sectional survey design gathering data from leaders and followers (active duty soldiers in the United States Army) and

incorporated archival data. We contacted two alumni classes of the United States Military Academy at West Point (USMA) who graduated three ("Class A") and five ("Class B") years prior to receiving this survey and have since been active-duty soldiers in the United States and abroad. At the time of data collection, these soldiers served as lieutenants ("Class A") and captains ("Class B").

This sample is well suited for exploring the hypothesized relationships for several reasons. First, since our investigation focuses on parental income, it is important to hold constant respondents' current income to guard against alternative explanations of results. By selecting graduating classes from the USMA who are actively serving, we control for respondents' current income, as well as characteristics that correlate with current income, such as level of education, rank or hierarchical position, occupational prestige, organizational reputation, and age. Second, we were able to access archival information, including parents' income and other demographic information that we control, from applications to the USMA. Because this archival information consisted of application materials to a military academy, participants were likely highly motivated to provide accurate information. Finally, virtually all soldiers who remain in the U.S. Army attain levels of lieutenants and captains. Thus, soldiers with varying levels of narcissism are equally likely to attain the positions of leadership that were the focus of this research, guarding against alternative explanations of the findings based on the possibility that soldiers with certain levels of narcissism are more likely to attain positions of leadership.

We sent an online survey to all members of Class A and Class B ($n = 1,510$), asking them to complete a survey about themselves, and to nominate up to five followers to complete a survey about their leadership. These participants nominated a total of 1,241 followers to evaluate their leadership. We left the online survey active for 12 weeks in order to maximize our response rate, given that many of the USMA graduates and their followers were actively deployed and did not have consistent Internet access. We also sent reminders every two weeks to those who had not responded, to try to increase participation. Given the cross-sectional nature of our research design, we took steps to mitigate response bias of various types by gathering data from multiple sources (leaders, followers, and archival data), randomizing the order of items within scales, varying response scale points, and separating the occurrence of the variables of interest within the

surveys (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Spector, 2006).

A total of 579 (38% of those contacted) USMA alumni completed the self-assessment. This response rate is likely conservative because numerous soldiers invited to participate in this research might not have read the invitation due to some Army servers filtering out the invitation for security reasons (we received messages that our survey invitation was classified as "spam" for some soldiers), or due to lack of access to the Internet when deployed. In addition, approximately 200 invited members had left the Army by the time we sent out the invitation. We found no significant differences on gender, race, parental income, and parental education (which we accessed via archival data) between respondents and non-respondents.

In addition, 444 nominated followers (36%) responded. After matching leader and follower data with archival information, 229 of the 579 (40%) USMA alumni had complete data on all focal variables and control variables (i.e., they completed the self-evaluation, nominated and were evaluated by at least one follower [range: 1 to 5 follower evaluations; $M = 1.67$], and we were able to obtain complete controls from their archival data). In our final sample, 82% of leaders were Caucasian, and 83% were male; among followers, 79% were Caucasian, and 85% were male.

Measures

Parental income. Parental income was obtained from USMA archival data. Applicants to the USMA complete the Cooperative Institutional Research Program survey, which asks respondents to provide their best estimate of their parents' income from the year prior to their application. Parental income is tracked in 14 categories, beginning with "less than \$10,000," and ending with "\$250,000 or more." We converted these response options to monetary amounts by using the midpoint of each category. Following a strategy proposed by Parker and Fenwick (1983), we assigned the highest category value by extrapolating from the midpoint of the second-highest income bracket, using frequencies for the second-highest and highest brackets, to assign a value to the highest category. This made the highest values \$275,000.

Narcissism. Narcissism was assessed using the 9-item ($\alpha = .70$) narcissism subscale from Jones and Paulhus' (2014) "short dark triad" measure, which is based on prior versions of the Narcissistic Personality Inventory (Ames, Rose, & Anderson, 2006; Raskin & Hall, 1979). Using a scale of "1" (*strongly disagree*) to "5" (*strongly agree*), participants rated their level

of agreement statements, including "I know that I am special because everyone keeps telling me so," "Many group activities tend to be dull without me," and "I feel embarrassed if someone compliments me" (reverse scored).

Leadership behaviors. Followers rated leaders' engagement in *relational-* and *task-oriented leadership behaviors* using five items ($\alpha = .78$) from the consideration dimension and five items ($\alpha = .80$) from the initiating structure dimension, respectively, of the Leadership Behavior Development Questionnaire XII (Stogdill, 1963).¹ Followers rated their level of agreement with statements concerning their leaders' behaviors using a "1" (*strongly disagree*) to "7" (*strongly agree*) scale. Given our need for brief and relevant measures, we selected the most appropriate items for this context from each of the two dimensions with input from the third author who has more than 20 years of experience in the U.S. Army. Example items reflecting relational-oriented behavior included "Is friendly and approachable" and "Does the little things to make it pleasant to be a member of the group" to describe the leader. Example items reflecting task-oriented behaviors included "Lets group members know what is expected of them" and "Encourages the use of uniform procedures."

Change-oriented behaviors were assessed using four items from the Multifactor Leadership Questionnaire 6S (Bass & Avolio, 1992).² We selected two of the three items from the dimension assessing the intellectual stimulation (example item: "Enables others to think about old problems in new ways") and two of the three items from the dimension capturing inspirational motivation (example item: "Provides appealing images about what we can do"). In each case, we eliminated one item that was highly redundant with other items. The four items showed high reliability ($\alpha = .88$). Followers rated their agreement with each statement using a "1" (*strongly disagree*) to "5" (*strongly agree*) scale.

¹ To ensure that our shortened versions of our leadership behavior measures were faithful representations of the complete versions, we conducted separate validation studies to ensure convergent validity of the items we chose. The data suggest the items we employed demonstrate strong convergent validity with the traditional measures. Full results with factor loadings available upon request.

² To ensure that our shortened versions of our leadership behavior measures were faithful representations of the complete versions, we conducted separate validation studies to ensure convergent validity of the items we chose. The data suggest the items we employed demonstrate strong convergent validity with the traditional measures. Full results with factor loadings available upon request.

Leader effectiveness

Follower-rated leadership effectiveness. Followers rated their leaders using four items ($\alpha = .95$) adapted from the General Self-Efficacy Scale (Chen, Gully, & Eden, 2001) and used in prior work to assess managerial effectiveness (Fast et al., 2014). Followers indicated their agreement with statements assessing their leaders' performance compared to other leaders with whom they had had experience. Ratings employed a 7-point scale ("1" = *strongly disagree*; "7" = *strongly agree*). Items included "Compared to others, this leader can do most tasks very well" and "Even when things are tough, my leader can perform quite well."

Work group behaviors. *Citizenship behaviors* were assessed using five items ($\alpha = .86$) adapted from Smith and colleague's (1983) organizational citizenship behaviors scale, and used previously by Mayer, Kuenzi, Greenbaum, Bardes, and Salvador (2009). Followers rated the extent to which they perceived people in their group engaging various behaviors. Example statements included "People in my group volunteer for things that are not required" and "People in my group help others who have heavy workloads." Ratings were done using a 5-point scale ("1" = *not at all*; "5" = *highly*).

Counterproductive behaviors were assessed using six items ($\alpha = .90$) from Bennett and Robinson's (2000) 12-item counterproductive work behaviors scale. Six of the 12 items were removed either because they were not relevant (e.g., "Falsified a receipt to get reimbursed for more money than was spent on business expenses") or deemed too sensitive in this context (e.g., "Discussed confidential information with an unauthorized person"). Using a "1" (*never*) to "5" (*all of the time*) scale, participants rated the frequency with which they witnessed group members engage in each behavior. Example statements included "Put little effort into their work" and "Neglected to follow a leader's instructions."

Control variables

Demographic characteristics (gender, ethnicity, and graduation year). We obtained gender, ethnicity, and class year from archival information maintained at the USMA. Each of these factors could influence or alternatively explain the degree to which parental income relates to narcissism. We controlled for gender (male = "0," female = "1") because prior studies have found that it relates to narcissism (Carlson & Gjerde, 2009; Twenge, Konrath, Foster, Campbell, & Bushman, 2008). We controlled for ethnicity (Caucasian = "0"; other ethnicity = "1") because it has been shown to relate to income and narcissism (Foster, Campbell, & Twenge, 2003). Graduation

year simultaneously controls for respondents' current rank (graduates of Class A [coded "0"] are lieutenants, and graduates of Class B [coded "1"] are captains) and their age, thus keeping constant cohort effects that may be present with narcissism (Twenge et al., 2008) and differences resulting from rank or time in position.

Background influences (parents' marital status, subjective perceptions of social class background, parental education, parental occupation prestige). Parental income is related to many other factors that could influence the development of narcissism. We thus controlled for several other aspects of participants' background. We obtained a categorical measure of participants' *parents marital status* ("0" = one or both parents deceased, or both alive but divorced or living apart; "1" = both parents alive and living together) from USMA archival information. We included this control as a potential factor that could influence the amount of money that was available in an individual's household during childhood, and because children from single, compared to dual, parent backgrounds exhibit different interpersonal styles as adults (Brennan & Shaver, 1998).

Some have argued that the effects of income reflect a subjective, comparative phenomenon (Adler, Epel, Castellazzo, & Ickovics, 2000; Kraus, Tan, & Tannenbaum, 2013). These arguments suggest that income itself is less important than how well off an individual perceives him- or herself to be compared to others. To control for this potential influence on our results, we asked survey respondents to identify their *perceptions of social class background* by selecting the class in which they thought they belonged while they were growing up. They could select "lower class" ("5"), "lower-middle class" ("4"), "middle class" ("3"), "upper-middle class" ("2"), or "upper class" ("1"). We reverse-scored this variable such that higher values corresponded to higher perceived social class background.

Education and occupational prestige are elements of social class that are correlated with income (Adler & Snibbe, 2003; Christie & Barling, 2009). Thus, it is important to control them to isolate the role of parental income. On our survey, focal participants indicated the highest level of *education achieved by their father/guardian 1 and mother/guardian 2*. The options were "less than high school" ("1"), "high school or GED" ("2"), "some college" ("3"), "2-year college degree" ("4"), "4-year college degree" ("5"), "master's degree" ("6"), and "doctoral degree or professional degree" ("7"). Participants could also select "I don't know." The parental education values were averaged. In instances where participants marked

“I don’t know” for a parent ($n = 5$), we used the other parent’s score.

To assess *parental occupational prestige*, participants were asked to type in what their “father/guardian 1” and “mother/guardian 2” did for a living in two open-ended text boxes. Participants were prompted to write in “I don’t know” or “none,” if applicable. Two trained research assistants (one doctoral student and one undergraduate student) who were blind to the hypotheses coded the occupations by assigning a United States Census Occupation Code. This list of codes is available from the United States Census Bureau’s web site (see United States Census Bureau, 2010). Assistants initially coded a small subset of the data. They then met to compare and discuss discrepancies. Next, they coded a second subset of the data, and were able to reliably produce the same codes at that stage. They thus proceeded to code the remaining responses independently. By the end of their independent coding, the inter-rater reliability for the job codes was high ($\kappa = .86$). Working together, the coders then resolved any remaining disagreements. We used Duncan’s socioeconomic index (Duncan, 1961) as a measure of occupation prestige, as this index is widely considered to be one of the most valid measures (Nakao & Treas, 1994). This scale ranges theoretically from “0” (*lowest prestige*) to “100” (*highest prestige*), but the actual lowest score is 17 (for “Sewing machine operators”) and the actual highest score is 96.98 (for “Physicians and surgeons”). We used the crosswalk published by the Center for Demography and Ecology (Frederick, 2010) to match occupation codes to socioeconomic index scores and averaged fathers’ and mothers’ occupational prestige scores.

RESULTS

Analysis Strategy

We tested our hypotheses using confirmatory factor analysis and structural equation modeling with maximum likelihood estimation. Structural equation modeling corrects for measurement error in multi-item measures and allows testing our hypothesized relationships simultaneously. We conducted all analyses using the lavaan (latent variable analysis) R package (Rosseel, 2012; R Core Team, 2015).

We first sought to determine the extent to which followers’ ratings of their leaders’ behaviors and the dependent variables agreed, or were interchangeable. We followed Smith-Crowe, Burke, Cohen, and Doveh’s (2014) recommendations for testing the

significance of r_{WG} and average deviance (A_D) scores, which capture the degree to which assessments of a single target are interchangeable. This procedure involves determining the average inter-item correlation (ρ) among scale items, determining the skew of the response distribution for comparison, and adjusting significance values criteria based upon this information as well as the number of respondents and number of items comprising each scale. Table 1 displays this information for each construct and compares scores to recommended cutoffs. There was significant agreement among respondents on both indices (r_{WG} and A_D) for all dimensions. Given the significant agreement and interchangeability of responses, we aggregated follower responses.

Descriptive statistics for all study variables are presented in Table 2.

Confirmatory Factor Analysis

We performed a confirmatory factor analysis to ensure that our items properly loaded onto the expected factors. We tested a seven-factor model including narcissism, three dimensions of leadership behavior, plus three criteria for leadership effectiveness, but excluding controls and the one-item measure of parental income. This model was a good fit of the data ($\chi^2[644] = 991.07$; root mean square error of approximation [RMSEA] = .05; Tucker–Lewis index [TLI] = .93; comparative fit index [CFI] = .93) (Hu & Bentler, 1999). We compared this model to a five-factor alternative model ($\chi^2[655] = 1375.71$; RMSEA = .07; TLI = .85; CFI = .86) in which the three leadership behaviors were collapsed into a single latent variable. Combining the three separate leadership behaviors into a single factor significantly reduced fit ($\chi^2_{diff}[11] = 384.64$, $p < .00$), supporting the theoretical distinction between these behaviors (DeRue et al., 2011). We also compared the seven-factor solution to a two-factor solution in which all follower-rated variables were collapsed onto a single latent variable ($\chi^2[664] = 2838.98$; RMSEA = .12; TLI = .55; CFI = .58). This model was a poor fit of the data.

Hypothesis Tests

We tested our structural model (see Figure 1) in which higher parental income relates to higher levels of narcissism, higher narcissism relates to lower engagement in the three facets of leadership behavior, and leader behaviors relate to the dependent variables. To aid interpretation of the results, we divided

TABLE 1
Agreement Statistics and Recommended Cutoff Points

	No. of Items	Scale Point	Avg. Inter-Item Correlation (<i>p</i>)	Distribution Skew	Recommended Cutoff Values ^a		Observed Values	
					<i>r</i> _{WG} (values should be above)	<i>A</i> _D (values should fall below)	<i>r</i> _{WG}	<i>A</i> _D
<i>Leader Behaviors</i>								
Task-oriented behaviors	5	7	.45	moderate	.39	1.08	.77	.43
Relational-oriented behaviors	5	7	.51	heavy	.44	.85	.71	.51
Change-oriented behaviors	4 ^b	7	.69	moderate	.41	1.07	.82	.34
<i>Leadership Outcomes</i>								
Perceived leader effectiveness	4 ^b	7	.82	moderate	.41	1.07	.80	.37
Citizenship behaviors	5	5	.56	moderate	.43	.66	.81	.35
Counterproductive behaviors	6 ^b	5	.60	moderate	.58	.67	.76	.42

^a Smith-Crowe et al. (2014).

^b Smith-Crowe and colleagues (2014) provided recommended cutoff values for 3-, 5-, and 10-item measures. For our 4- and 6-item scales, we used a conservative approach, comparing our agreement values to the next highest category for which cutoff recommendations are provided. Thus, the 4-item scales were compared to 5-item recommended cutoffs, and the 6-item scale was compared to the recommended cutoffs for a 10-item scale.

parental income values by 100,000. We included controls by specifying pathways from each demographic and background variable to narcissism to control alternative explanations for the parental income-to-narcissism link. Testing this model revealed whether the associations described in Hypotheses 1–5 are supported. To ensure the robustness of our results, we tested our model excluding controls, and the results were unchanged. We further followed recommendations by Zhao, Lynch, and Chen (2010) and Hayes (2013), who, while arguing that a significant indirect effect is the sole criteria for establishing mediation, also recommended interpreting indirect effects in relation to direct effects to determine the type of mediation that the data suggest. Thus, we also specified direct pathways from parental income to the criteria for leadership effectiveness. The theorized model presented in Figure 1 was a good fit of the data ($\chi^2[943] = 1503.98$; RMSEA = .05; TLI = .87; CFI = .88), although the values of TLI and CFI were slightly below the traditional cutoff of .90.

Hypothesis 1, that parental income would be positively associated with adult narcissism, was supported ($\beta = .79$, $SE = .37$; $p = .04$). Hypotheses 2a–c were also supported, suggesting that narcissism relates to less engagement in relational- ($\beta = -.75$, $SE = .29$; $p = .01$), task- ($\beta = -.77$, $SE = .28$; $p = .01$), and change-oriented ($\beta = -.77$, $SE = .29$; $p = .01$) leadership behaviors. Regarding the relationships between leadership behaviors and ratings of leadership effectiveness, eight of nine hypotheses were supported. Supporting Hypotheses 3a–c, relational-oriented

behaviors were significantly related to leader effectiveness ($\beta = .46$, $SE = .08$; $p < .01$), citizenship behaviors ($\beta = .16$, $SE = .06$; $p = .01$), and counterproductive behaviors ($\beta = -.15$, $SE = .06$; $p = .02$). Task-related behaviors were related to citizenship ($\beta = .16$, $SE = .06$; $p = .01$) and counterproductive behavior ($\beta = -.18$, $SE = .08$; $p = .01$), but not leader effectiveness ($\beta = .10$, $SE = .09$; $p = .23$). Thus, Hypotheses 4b and 4c were supported, but Hypothesis 4a was not. Lastly, supporting Hypotheses 5a–c, change-oriented leader behaviors were related to leader effectiveness ($\beta = .67$, $SE = .08$; $p < .01$), citizenship ($\beta = .38$, $SE = .06$; $p < .01$), and counterproductive behavior ($\beta = -.27$, $SE = .06$; $p < .01$).

We tested the serial mediation hypotheses (Hypotheses 6–8) using the three-step procedure advocated by Taylor, MacKinnon, and Tein (2008), which recommends using the structural equation modeling framework to simultaneously estimate the significance of indirect effects using bias-corrected accelerated bootstrap confidence intervals of the product of coefficients for each path in the mediational chain. We conducted the bootstrap using 1,000 random samples with replacements and interpreted our results using 95% confidence intervals (CIs). To establish significance, the CIs must exclude zero. The indirect effects, direct effects, and their CIs are presented in Table 3. We also present the total indirect effect—the sum of all separate indirect effects (Preacher & Hayes, 2008)—of parental income on each outcome.

Hypotheses 6a–c posited that the effects of parental income on perceived leader effectiveness would be serially mediated by narcissism and relational-

TABLE 2
Descriptive Statistics and Correlations among Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Parental Income	108,689.43	.54														
2 Narcissism	2.82	.51	.21**													
3 Relational-Oriented Behavior	6.12	.76	-.03	-.12 [†]												
4 Task-Oriented Behavior	6.17	.60	-.00	-.14*	.56**											
5 Change-Oriented Behavior	4.13	.59	.04	-.11 [†]	.48**	.55**										
6 Follower-Rated Effectiveness	6.32	.81	.04	-.08	.54**	.48**	.65**									
7 Citizenship Behaviors	4.15	.54	.07	-.05	.42**	.42**	.55**	.36**								
8 Counterproductive Behaviors	1.73	.55	-.00	.00	-.30**	-.37**	-.42**	-.39**	-.49**							
9 Parental Education	4.47	1.26	.41**	.02	-.09	-.07	-.11	-.06	-.05	.00						
10 Parental Occupational Prestige	62.09	15.71	.43**	.02	-.09	-.05	-.07	-.10	-.09	-.03	.63**					
11 Parental Marital Status	.77	.42	.14*	.12 [†]	.11	.05	.12	.06	.02	.05	.23**	.19**				
12 Subjective Class Origin	2.95	.78	-.53**	-.07	-.02	-.02	-.00	-.00	-.03	-.03	.43**	.43**	.31**			
13 Ethnicity	.83	.34	.03	-.01	-.02	-.10	-.07	-.03	-.05	-.02	.19**	.03	-.05	.10		
14 Gender	1.16	.37	.05	-.07	-.01	.05	-.01	-.03	.01	.10	-.05	-.02	-.1	.05	.02	
15 Graduation Year	2009.76	1.48	.12 [†]	.14*	-.03	-.06	.01	.05	.04	.01	.04	.06	-.05	.07	.12 [†]	.13 [†]

Note: Parental income appears untransformed above.

** $p < .01$
* $p < .05$
† $p < .10$

task- and change-oriented behaviors. The 95% CI excludes zero for paths through relational- and change-oriented behavior, but not through task-oriented behavior. Thus, Hypotheses 6a and 6c are supported, but Hypothesis 6b is not. Hypotheses 7a–c posited that parental income would exert a serially mediated effect on citizenship behavior via narcissism and the leadership behaviors. The 95% CI excludes zero through change-oriented behavior, but not through relational- or task-oriented behavior. Thus, Hypothesis 7c is supported, but Hypotheses 7a and 7b are not. Hypotheses 8a–c postulated serially mediated effects of parental income via narcissism and the leadership behaviors on followers’ counterproductive behaviors. The 95% CI around the effect excludes zero via task- and change-oriented behavior, but not through relational-oriented behavior. We therefore conclude that Hypotheses 8b and 8c are supported, but Hypothesis 8a is not.

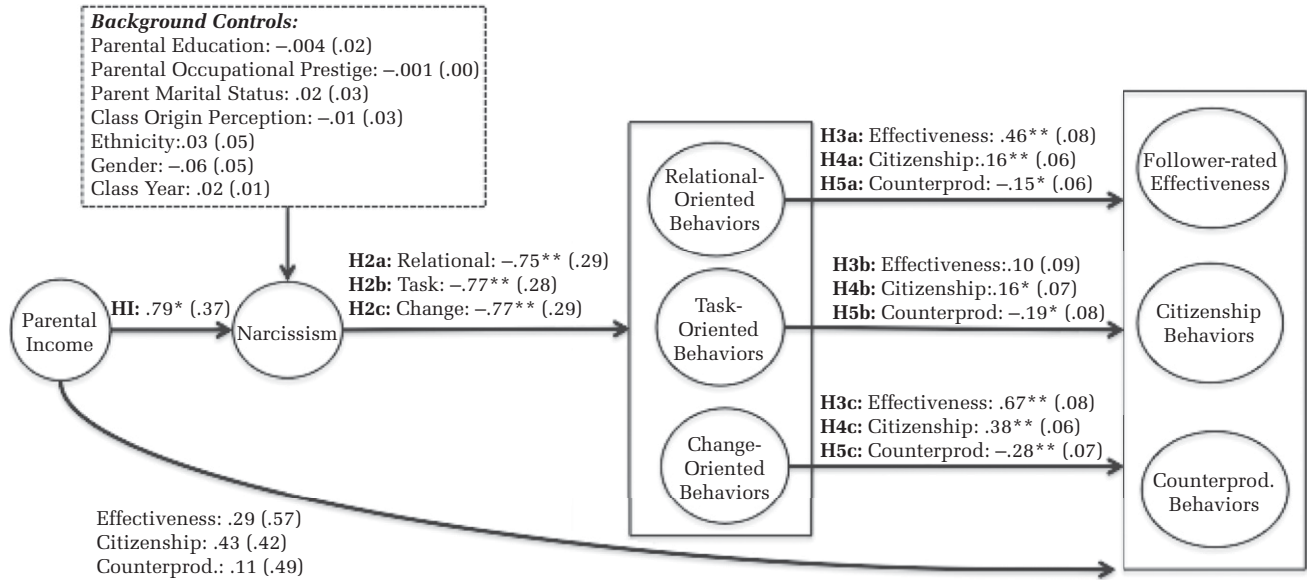
Moreover, the total indirect effects of parental income on follower-rated effectiveness, citizenship behaviors, and counterproductive behaviors are significant, revealing that parental income influences future leadership outcomes indirectly through narcissism and its subsequent impact on leadership behaviors. In light of the non-significant direct effects from parental income to outcomes, we conclude that the findings suggest indirect-only mediation in each case in which the CI around the indirect effect excludes zero (Zhao et al., 2010).

Post-Hoc Analyses

We explored whether the association between parental income and narcissism is attenuated with increasing time away from the context of one’s upbringing. Regressing narcissism on parental income, graduation year, and their interaction revealed that the narcissism levels of participants who had been in the Army for longer were not less predicted by parental income compared to their counterparts who had been in the Army for three fewer years ($\beta = .35, SD = 3.01; p = .91$). Although this analysis does definitely rule out fading effects of parental income over time because we only examined a three-year difference, it is suggestive of the effects persisting despite the strong normative pressures that likely operate in the Army.

In addition, to examine if narcissism exhibited a curvilinear relationship with leadership effectiveness, as in some previous studies (Grijalva, Harms, Newman, Gaddis, & Fraley, 2015), we ran six regression analyses (one for each facet of leadership behavior or leadership effectiveness) in which the criterion was regressed on narcissism and its quadratic term. In each analysis, the

FIGURE 1
Parental Income, Narcissism, Leadership Behaviors, and Outcomes



Notes: Results shown with unstandardized coefficients. Standard deviations shown in parentheses.

** $p < .01$
 * $p < .05$

quadratic term failed to reach significance (all t s < 1.52 ; all p s $> .13$).

DISCUSSION

This investigation revealed that the income of an individual’s parents is positively associated with later narcissism. Further, through higher levels of narcissism, parental income was indirectly associated with less engagement in behaviors that are traditionally viewed as central to the leadership role, and, in turn, lower effectiveness across multiple dimensions. These findings suggest that there is a psychological “residue” (Miller et al., 2009) from growing up wealthier or poorer that relates to future leadership effectiveness via disposition and behaviors. In addition, the findings advance the idea that the macro social trend of increasing income disparity—through the relationship between income and narcissism—has implications for our understanding of management scholarship and practice.

Theoretical Implications

Prior scholarship has studied multiple traits that influence leadership behavior and effectiveness

(Eagly & Johnson, 1990; Judge, Colbert, & Ilies, 2004; Judge, Piccolo, & Ilies, 2004), yet the role of the material conditions of one’s upbringing has been largely absent. Here, we built theory by connecting research on parental income and research on leadership for the first time. As such, we extend the study of leadership by showing how parental income—an often unseen, unstudied, and unaccounted for aspect of a leader—is associated with leadership outcomes. These conclusions are bolstered by unique features of our research context that naturally control explanations that are difficult to account for in other settings. In particular, pinpointing the role of parental income during childhood is challenging because it is often confounded with current income. Children of richer parents tend to later have higher income themselves. Here, we leveraged a context where members vary in their parental income, yet have comparable current income (because they are at the same rank) to rule out current income as an alternative explanation.

In addition, our investigation extends our understanding of how income shapes social behavior. Past research has found that income shapes behaviors in interpersonal relationships with strangers (Kraus & Keltner, 2009; Piff et al., 2010) and spouses (Amato &

TABLE 3
Mediated Effects of Parental Income on Leadership Effectiveness

Serially Mediated Pathways		Indirect Effect [LLCI, ULCI]	Total Indirect Effect [LLCI, ULCI]	Direct Effect [LLCI, ULCI]
H6: Parental Income to Effectiveness via	H6a: Narcissism & Relational-Oriented Behavior	-.27 [-1.09, -.03]		
	H6b: Narcissism & Task-Oriented Behavior	-.06 [-.59, .08]	-.74 [-2.04, -.12]	.29 [-.73, 1.32]
	H6c: Narcissism & Change-Oriented Behavior	-.40 [-1.35, -.10]		
H7: Parental Income to Citizenship via	H7a: Narcissism & Relational-Oriented Behavior	-.09 [-.59, .00]		
	H7b: Narcissism & Task-Oriented Behavior	-.10 [-.49, .01]	-.42 [-1.34, -.06]	.43 [-.26, 1.20]
	H7c: Narcissism & Change-Oriented Behavior	-.23 [-.88, -.02]		
H8: Parental Income to Counterproductive Behavior via	H8a: Narcissism & Relational-Oriented Behavior	.09 [-.01, .50]		
	H8b: Narcissism & Task-Oriented Behavior	.11 [.004, .50]	.37 [.01, 1.09]	.11 [-.81, 1.10]
	H8c: Narcissism & Change-Oriented Behavior	.17 [.01, .65]		

Notes: **Bold** indicates a significant effect. Unstandardized estimates shown. Total indirect effect equals the sum of specific indirect effects. LLCI = lower level of 95% confidence interval; ULCI = upper level of 95% confidence interval.

Previti, 2003). Our findings extend this past work, suggesting that parental income indirectly shapes leaders' engagement behaviors that are fundamental to the leadership process.

Our findings also inform social learning approaches to leadership. Prior work has suggested that children learn leadership styles or implicit theories from their parents (e.g., Hartman & Harris, 1992; Keller, 2003). Our study argues that an important and perhaps previously unseen way that parents influence their children, both during childhood and adulthood, is via material resources.

Finally, the findings extend the integrative trait-behavioral model of leadership effectiveness (DeRue et al., 2011). While this model argues that traits motivate behaviors among leaders, it has yet to identify the origins of the traits that set the model in motion. We find that one such element is parental income.

Limitations and Future Directions

Our investigation is the first to explore how the parental income of organization members in leadership roles relates to their future behavior after becoming members of organizations, and identifies several opportunities for future research. One such opportunity consists of exploring other pathways by which parental income relates to leadership. In

particular, it is unlikely that we have uncovered the only influences that parental income may have on people's organizational outcomes when they are adults. While we uncovered negative indirect effects of parental income on three dimensions of leader effectiveness, parental income might be related to other behaviors or effectiveness criteria not examined in this study. Studying these additional pathways would explain why organization members with higher-income parents might be performing some aspects of the leadership role effectively.

Relatedly, the trait-behavioral model utilized in this study focuses on broad dimensions of leadership behavior, but parental income could predict the degree to which leaders engage in other leadership behaviors. For instance, to the extent that a higher-income background facilitates narcissism and a concomitant self-focus, we might also expect parental income to relate negatively to servant leadership, which prioritizes others' needs over one's own (Liden, Wayne, Zhao, & Henderson, 2008). Moreover, it is possible that leaders from a higher-income background have opportunities (e.g., educational opportunities; Kornrich & Furstenberg, 2013) to develop a wider range of competencies and have greater technical abilities in some areas than lower-income background leaders.

Given the cross-sectional nature of the survey, we cannot conclusively establish causality in some of

the reported relationships. In addition to the causal paths that we argued, leaders whose followers engage in few helpful and more harmful behaviors and perceive them to be ineffective might limit leaders' engagement in behaviors that are traditionally viewed as central to the leadership role. Moreover, although we controlled for certain factors linked to parental income (e.g., parental education, parental occupation prestige, subjective perceptions of childhood social class), there are other factors that we did not control for that could provide alternative explanations. For instance, leaders with different parental income may have attended different types of schools or had parents with different personality traits, and these other variables might plausibly influence the differences in narcissism and leadership behavior and effectiveness that we observed in this study.

Also related to our survey design, we have same-source data ratings for leadership behaviors and dimensions of effectiveness, which could inflate relationships between measures. However, we are reassured by meta-analytic findings indicating that relationships between leadership behaviors and numerous criteria are not weakened when different-source rather than same-source data are used (see Judge, Piccolo, & Ilies, 2004).

Readers should consider that, as in most research on income, there were few participants in the highest income bracket ($n = 15$) and there may be no participants with very high parental income (e.g., \$1 million or more) in our sample. Though we found no curvilinear association between income and narcissism ($\beta = .24$; $p = .16$), we cannot rule out the possibility that leaders with very rich parents behave differently than leaders with merely high parental income.

A final limitation of this work was that it was carried out in one organization characterized by strong norms, and with leader–follower relationships that are ongoing, in which parties are well acquainted, and in which the negative effects of narcissism are particularly felt. While strong contexts of this type can “facilitate theory building because the dynamics being examined tend to be more visible than they might be in other contexts” (Pratt, Rockmann, & Kaufmann, 2006: 238), it is possible that, in other organizations, relationships may not proceed similarly. Specifically, in organizations with less frequent interaction, relationships between leaders and followers may never develop significantly past the “emerging zone,” and narcissism may evidence more positive associations with leader behavior and effectiveness (Campbell & Campbell, 2009). Also, in some organizations, narcissists may get “fast-tracked” and therefore remain in emerging zones

while moving to higher positions. In these cases, there may be benefits that accrue to narcissistic leaders. Similarly, the Army might be an organization in which self-serving behaviors are seen as particularly negative. There may be organizations in which self-oriented behaviors by leaders are viewed more favorably than in the Army.

Practical Implications

Our findings document pathways through which high parental income may negatively influence leaders' effectiveness. Organizations might benefit from taking active steps to curtail the entitlement and grandiosity that at least some leaders with wealthy backgrounds are likely to exhibit. One possibility consists of eliciting compassion in leaders. In past research, an experimental manipulation of compassion (a clip showing children in need) increased the helpful behavior of participants with higher parental income to a level that was comparable to that of participants with lower parental income (Piff et al., 2010). Similar interventions could be designed to reduce the entitlement and grandiosity, and, in turn, improve the effectiveness of leaders with higher parental income. Alternatively, organizations could potentially counteract narcissism by prioritizing and valuing humility (Owens, Wallace, & Waldman, 2015).

Although our findings may suggest that leaders could be selected at least in part on the basis of their parental income, we caution against this practice. In our view, the practical implications of our findings concern attenuating the negative pathways we identify, and do not suggest that employees with high parental income should not be promoted to leadership positions, or that leaders with higher parental income are incorrectly placed in their organizations. Rather, our findings suggest they may simply lead differently and rely on different abilities, and the negative outcomes that accrue via narcissism and subsequent behaviors should be mitigated. Indeed, it is entirely likely that parental income exerts positive effects on outcomes other than those we studied.

CONCLUSION

We found that early life experiences with income are related to levels of narcissism and subsequent leadership behaviors and outcomes. These findings open the door to future explorations of how societal

trends such as income disparity might influence leader–follower relationships and other organizational dynamics. The findings also suggest that macro trends such as increasing income disparity can influence organizational life by altering the traits and behaviors of those entering the workplace. After all, as economic inequality rises, we may expect to see an increasing number of leaders who had wealthy parents, are more narcissistic, and do not rely on classic leadership behaviors to lead. We also may come to see less narcissistic leaders from lower-income backgrounds in a different light, recognizing they might engage in these behaviors to a greater extent, and that their style, if given the opportunity, may be well suited to some contexts. Given the increasing gap between the “haves” and the “have nots,” understanding the relational and leadership tendencies of people from each income group is an important question for the future of organizational—not to mention societal—scholarship.

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