It’s time: A meta-analysis on the self-control-deviance link

Alexander T. Vazsonyi *, Jakub Mikuška, Erin L. Kelley

University of Kentucky, Department of Family Sciences, 316 Funkhouser Building, Lexington, KY 40506, United States

A R T I C L E   I N F O

Article history:
Received 14 October 2016
Accepted 18 October 2016
Available online xxxx

Keywords:
Crime
Delinquency
Self-control theory
General theory of crime
Self-regulation

A B S T R A C T

Purpose: The current meta-analysis examines the link between self-control and measures of crime and deviance, taking stock of the empirical status of self-control theory and focusing on work published between 2000 and 2010.

Methods: A total of 796 studies were reviewed for inclusion/exclusion criteria and yielded a final study sample of 99 studies (88 cross-sectional and 19 longitudinal effect sizes, analyzed separately). Random effects mean correlations between self-control and deviance were analyzed for cross-sectional and longitudinal studies, respectively. Publication bias was assessed using multiple methods.

Results: A random effects mean correlation between self-control and deviance was \( r = 0.415 \) for cross-sectional studies and \( r = 0.345 \) for longitudinal ones; this effect did not significantly differ by study design. Studies with more male participants, studies based on older or US-based populations, and self-report studies found weaker effects.

Conclusions: Substantial empirical support was found for the main argument of self-control theory and on the transdisciplinary link between self-control and measures of crime and deviance. In contrast to Pratt and Cullen, but consistent with theory, the effect from cross-sectional versus longitudinal studies did not significantly differ. There was no evidence of publication bias.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

Cited over 500 times in the past 15 years (Web of Science), Pratt and Cullen’s (2000) meta-analysis tested empirical work based on Gottfredson and Hirschi’s (1990) theory; it included 21 studies or 17 independent data sets, based on 49,727 individuals, published between 1993 and 1999. Findings provided substantial support for the low self-control-crime/deviance link; effect size exceeded 0.20, a finding which indicated that “this effect size would rank self-control as one of the strongest known correlates of crime” (Pratt & Cullen, 2000, p. 952). Other findings from the work showed how different operationalizations of self-control did not affect the strength of this relationship, nor did the relationship vary by sample composition (age, sex, or race). Many findings supported Gottfredson and Hirschi’s theoretical predictions, some did not. For instance, the study found that the effect of low self-control was weaker in longitudinal studies and that social learning constructs continued to play a role, above and beyond measures of low self-control, in explaining the variability in crime and deviance. Few criminological theories have been tested through a meta-analysis prior to Pratt and Cullen’s work; instead, efforts relied on narrative literature reviews to assess the empirical support for theories of crime. Thus, Pratt and Cullen argued that meta-analyses were an underused tool.

There is no question on how both the theoretical work and the meta-analysis has impacted criminology, and a number of allied disciplines; however, over 15 years have passed, and thus, the time seems right for further systematic review of the empirical evidence. The current study seeks to build on and expand this work, broadening the scope by examining a larger universe of samples and studies during the subsequent decade, from 2000 to 2010. The current study included a total of 99 empirical studies, with 88 cross-sectional and 19 longitudinal effects, covering 514,291 individuals from 95 independent data sets.

1.1. Literature review

1.1.1. The impact of self-control theory

Since its publication, Gottfredson and Hirschi’s A General Theory of Crime has had a profound impact in criminology, inspiring a wealth of empirical studies that test the link between low self-control and measures of crime or deviance (Engel, 2012; DeLisi & Piquero, 2011; Pratt & Cullen, 2000). Arguably one of the most prominent theories in criminology, Tittle (2011, p. 91–92) argued that “Self-control theory (1990) would have to be regarded as one of the most popular of current theories, judging by the degree of research interest and the extent to which its theoretical premises have been integrated into other contemporary explanatory schemes.” In addition, DeLisi (2013) and others...
have argued that theoretical premises and the self-control-deviance link appears to be “transdisciplinary” in nature; elements from and predictions based on self-control theory have influenced and appeared in work from a number of social and behavioral sciences, including psychology, developmental sciences, educational sciences, and health-risk behavior research, among others (Duckworth & Seligman, 2005; Eisenberg et al., 2005; Miller, Barnes, & Beaver, 2011; Tangney, Baumeister, & Boone, 2004).

Empirical support for the theory exists not only for data collected in the United States, but also outside of North America, in fact one of the original theoretical predictions made by Gottfredson and Hirschi, which positioned the theory to be not bound to a particular culture or developmental context, thus in effect culture free (e.g., Rebello, Straus, & Medeiros, 2008; Smith & Crichlow, 2012; Vazsonyi & Belliston, 2007; Vazsonyi, Pickering, Junger, & Hessing, 2001). While some studies have demonstrated no relationship between self-control and deviance in cross-cultural samples (e.g., Cheung & Cheung, 2008; Hwang & Akers, 2003; Meneses & Akers, 2010), a number of other studies have.

1.1.2. Critiques of self-control theory

Since the publication of the theory, there have been a number of critiques of the work. For instance, Akers (1991) argued that the theory was tautological. Other critics have indicated that theory failed to operationalize self-control, and importantly, how it is different from criminal or deviant behaviors (Akers & Sellers, 2004). In part addressing this criticism, Grasmick, Tittle, Bursik, and Arneklev (1993) developed the most widely used attitudinal scale to measure low self-control; at the same time, Gottfredson and Hirschi (1990) have argued that behavioral measures of self-control were the preferred method for assessing self-control.

Over the past two decades, hundreds of empirical studies have been conducted to test self-control theory, using both attitudinal and behavioral measures. Again, Pratt and Cullen (2000) found that the effect size of the link between self-control and crime was largely unchanged based on how self-control was operationalized, either with attitudinal or behavioral measures. Hirschi (2004) also recast the measurement of self-control, slightly departing from several original theoretical propositions by linking self-control to social control, to indicators of social bonds. Despite some apparent differences, Hirschi maintained that behavioral measures of self-control were the most salient measures in operationalizing self-control. Controversy continues to surround the discussion on how to operationalize self-control, where some research finds contradictory evidence regarding different attitudinal and behavioral measures (Gunter & Bakken, 2012; Morris, Gerber, & Menard, 2011; Piquero & Bouffard, 2007; Rocque, Posick, & Zimmerman, 2013; Vazsonyi, Roberts, & Huang, 2015).

1.1.3. The development of self-control: Biology and socialization

An additional area of controversy about self-control theory involves how self-control develops (Wright & Beaver, 2005). Despite overwhelming evidence supporting self-control theory, much research has focused on the stability of self-control over time to test tenets of the theory, in part overlooking the question of actual processes behind the development. Gottfredson and Hirschi identify parental socialization practices within the first ten years of a child’s life as one of the main developmental precursors of self-control (Vazsonyi & Huang, 2010). This focus has lead critics to argue that Gottfredson and Hirschi minimize, or even ignore, the effects of biology or genes on the development of self-control and the understanding of crime and deviance (Wright & Beaver, 2005). Vazsonyi et al. (2015) have recently argued that their original work in fact both recognized and acknowledged individual differences, presumably present at birth, but that their work focused on socialization processes in the development of self-control, in part related to its policy implications. Seminal work by Piquero, Jennings, Diamond, Farrington, and Reingle Gonzalez (2016) has substantiated that, in fact, this focus has paid off, that self-control is malleable and can be addressed in prevention and intervention work, both during childhood and adolescence. In turn, this has profound implications for criminal justice policy.

In addition to secondary socialization contexts of self-control, such as schools (Hay, 2001; Turner, Piquero, & Pratt, 2005), biology has an important role in self-control and in its development (Beaver, Connolly, Schwartz, Al-Ghamdi, & Kobeisy, 2013; Beaver, Wright, & DeLisi, 2007; Wright & Beaver, 2005). Wright and Beaver (2005) found that between 55% - 66% of the variability in self-control was attributable to heredity. Similarly, Beaver et al. (2013) found that between 78% and 89% of the observed stability in self-control over time and between 74% and 92% of the changes in self-control were related to genetic factors. Thus, biology and socialization play a complex and dynamic role in self-control and its developmental course.

1.1.4. The stability postulate

As mentioned, much work has focused on the stability of self-control theory over time because Gottfredson and Hirschi (1990) argue that once established by ages 8 to 10, self-control remains relatively stable over the life-course, not in absolute terms, but as rank ordering. Some studies have found support for this (Arneklev, Cochran, & Gainey, 1998; Mitchell & Mackenzie, 2006; Turner & Piquero, 2002; Vazsonyi & Huang, 2010). Vazsonyi and Huang (2010) showed, based on a sample of over 1000 children followed over a 6-year period from preschool to fifth grade, that self-control was stable (rank order stability); self-control also positively increased over the same time period, in part explained by socialization influences in the home. Other studies have found evidence to the contrary (Burt, Simons, & Simons, 2006; Burt, Sweeten, & Simons, 2014; Hay & Forrest, 2006; Ray, Jones, Thomas, & Jennings, 2013). For example, Burt et al. (2014) tested the stability of self-control over five assessments in the Family and Community Health Study, from ages 10 to 25. Their findings provided evidence of instability over time. Finally, other recent research on personality development has provided evidence that part of the “Big Five” overlap with self-control (Astin & Cheung-Blunden, 2012; Fein & Klein, 2011; McCrae, 2010; Miller & Lynam, 2001; van Gelder & de Vries, 2013), and that personality traits change over the life course (Caspi & Roberts, 2001; Helsdon, Jones, & Kwan, 2002; McCrae et al., 1999; Morizot & LeBlanc, 2005).

1.1.5. The current study

The influence by Pratt and Cullen’s meta-analysis cannot be overstated. Nevertheless, the time seems ripe to conduct another, more comprehensive meta-analysis, one that also takes a broader transdisciplinary approach. A meta-analysis is, in essence, a “snapshot in time” and the current study seeks to explore the relationship between self-control and criminal and deviant behaviors in empirical research published during the decade immediately following Pratt and Cullen’s work. Since Pratt and Cullen’s meta-analysis, there has been a dramatic increase in the amount of scholarship and empirical tests focused on self-control theory, and more generally, on the link between self-control and measures of crime, deviance, and norm violations.

One more recent meta-analysis has partially addressed this gap in the literature. A study by de Ridder, Lensvelt-Mulders, Finkenauer, Stok, and Baumeister (2012) analyzed the results of 102 studies focusing on the relationships between self-control and a variety of behavioral outcomes, including school and work achievement, interpersonal functioning, well-being, addictive behaviors, and deviance. Based on aggregated samples ranging from 666 to 12,870 participants, and including 6 to 22 studies, they found that self-control (measured either by the Barratt Impulsiveness Scale, or the Grasmick et al. (1993), low self-control scale) was consistently associated with deviance (r range: 0.15–0.25) and addictive behavior (r = 0.25). This work which took a broader view, leaves room for a more narrow and more in-depth meta-analysis focused on the link between self-control and deviance. Their sample of studies omits important work conducted which was not explicitly focused on self-control theory, and thus does not accurately reflect the
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدهای موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات