



Joining Families

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REAL WORLD RESEARCH FOR FAMILY ADVOCACY PROGRAMS

FEATURED INTERVIEW

Intergeneration Transmission of Childhood Abuse and Neglect: What is the Evidence?

An Interview with Cathy Spatz Widom



Cathy Spatz Widom

Cathy Spatz Widom is Distinguished Professor in the Psychology Department at John Jay College and a member of the Graduate Center faculty, City University of New York. She is a fellow of the American Psychological Association (Division 41—Law and Psychology), the American Psychopathological Association, and the American Society of Criminology. A former faculty member at Harvard, Indiana, University at Albany (SUNY), and New Jersey Medical School, Widom is co-editor of Journal

of Quantitative Criminology and has served on the editorial boards of psychology and criminology journals. She is a frequent consultant on national review panels and has been invited to testify before congressional and state committees. She has published extensively on the long-term consequences of child abuse and neglect, including numerous papers on the cycle of violence. Widom served on the Committee on Law and Justice at the Commission on Behavioral and Social Sciences at the National Research Council (NRC) and was co-chair of the NRC Panel on Juvenile Crime, Juvenile Justice. Professor Widom has received numerous awards for her research, including the 1989 American Association for the Advancement of Science Behavioral Science Research Prize for her paper on the cycle of violence. She will be awarded the Stockholm Prize in Criminology in 2016. Since 1986, Widom has been engaged in a large study to determine the long term consequences of early childhood abuse (physical and sexual) and neglect and is currently completing research on the intergenerational transmission of violence, which she describes in the interview in this issue of JFJE.



Dr. McCarroll: Your recent publication in Science (2015) was important in learning more about intergenerational child maltreatment. Would you please describe your study and how it differs from other published literature on this subject?

Dr. Widom: There are a lot of differences between it and other studies that have addressed this same issue. My study was longitudinal and

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In This issue

The topic of this issue of JFJE is the intergenerational transmission of child maltreatment. Our interview is with Cathy Spatz Widom, PhD, Distinguished Professor of Psychology at the John Jay College of Criminal Justice, City University of New York. In the interview, she discusses her recent article published in *Science*. We give the background of the intergenerational study as well as her past research and recent research on a gene that can be affected by maltreatment. Building Bridges to Research describes mediators and moderators, two important statistical concepts that are helpful in understanding complex research. Websites of interest features the National Institute of Health's (NIH) Translational Research on Child Neglect Consortium, the Social Policy Report summarizing biological factors in child maltreatment, and current research on information on child neglect from the NIH Office of Behavioral and Social Sciences Research (OBSSR).

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The offspring of parents who have histories of abuse and neglect do not themselves report a higher incidence of being physically abused than the offspring of parents who do not have those histories.

included three generations of parents and children. No one has used a design like this where they have children who were abused and/or neglected and then followed them as adults and then followed their children. Another strength of the study was that we had different sources of information for the outcomes. In many studies, there is a reliance on only one reporter. In our study, we used reports from parents and offspring as well as official reports.

Dr. McCarroll: What did you find about physical abuse?

Dr. Widom: One of the most important findings was that the offspring of those who have histories of abuse and neglect do not themselves report a higher incidence of being physically abused than the offspring of parents who do not have those histories. They both report fairly high rates of what we consider to be physical abuse, but they do not differ. Similarly, Child Protective Service (CPS) reports do not show a difference between the two groups in terms of being physically abused. This is very provocative and really surprising. We are going to try to tease this out, to see if we can get a better handle on why there is not a difference. However, our sample is heavily weighted toward lower socioeconomic status groups. It

may be that the kinds of things that are considered physical abuse are common practices and do not differentiate between the two groups.

Dr. McCarroll: What were the findings for the other types of child maltreatment, sexual abuse and neglect?

Dr. Widom: We found an increased risk for those kids. If the parents have a history of sexual abuse, or any kind of abuse, their children are at increased risk for being sexually abused. But these findings do not indicate whether it is the parent who is the perpetrator of the sexual abuse. For example, we are speculating that if you have a mother who has a history of neglect, she may put her child at risk for being sexually abused by someone else — if she has multiple partners or she's failing to supervise. Regardless, her kids are increased risk for being sexually abused. That's one thing that we want to investigate more carefully.

Dr. McCarroll: What did you find for the parents who were neglected?

Dr. Widom: Children whose parents had histories of neglect were also at increased risk for being maltreated. We are still working on mediators between parents with histories of neglect and their risk of maltreating their child. We want to investigate the potential mediators or moderators that may be at work there for the neglected and sexually abused kids.

Dr. McCarroll: You said that both groups of parents, abused and non-abused, reported fairly high rates of physical abuse. Can you calculate the percentage of physical abuse in both populations?

Dr. Widom: For the *Science* paper, we tried to come up with one number for the intergenerational transmission, but it turns out that it varies tremendously by type of abuse. We could not come up with a simple number. But, if you look at CPS reports, for example, about 5–7% of the parents who have histories of abuse have children who have been physically abused. But, that is versus 5.4% of the children with parents without those histories. If you look at the self-reports of the parents, it is very close. It was 26% in the parents with histories of abuse versus 24% in the parents without abuse, not a significant difference. Thus, about a quarter of those in both groups are saying that they physically abuse their kids. Then, if you look at the kids who are reporting physical abuse,

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We could not come up with a simple number for the intergenerational transmission of maltreatment. It varies tremendously by the type of abuse.

depending on the measure, it ranges from 27% to 67% of the kids whose parents have histories. Among the control kids, that is, kids whose parents do not have histories, it's an even wider range — it goes from 21% to 75%: 75% of the kids whose parents do not have a history of abuse are saying that they were physically abused before the age of 12. So, it's just a very complicated picture, but these data are not showing a difference in risk of physical abuse and we really do not know why.

Dr. McCarroll: There are many, many papers on the intergenerational transmission of childhood maltreatment.

Dr. Widom: Most of these studies try to come up with a single number, and people report large differences in its likelihood, from 30–40% or 30–60%. Our goal was to come up with a number that would show the percent of parents who have these histories and go on to abuse their kids, that is, to go on to have kids who are abused. We struggled for a long time, and finally decided we just could not do that with the data that we have. We cannot have just one number because the pictures are so different depending on what type of abuse you are talking about. That is still something that we are still struggling with because everyone wants something that is a lot simpler. People may just look at one type of abuse and then assume that it is the same for all types of abuse.

Dr. McCarroll: Please tell me more about your previous research on child neglect.

Dr. Widom: Over the years we have been studying a large sample of people with histories of childhood neglect. People have made the assumption that it is poverty that is driving neglect and its negative consequences. This assumption is not supported by our empirical evidence. We looked at childhood neglect and childhood poverty as separate and distinct factors in an analysis and we looked at the extent to which they predicted mental health outcomes, academic achievement, and crime. We found different patterns depending on the outcome. So, the whole idea that it is really poverty driving the consequences is false. Poverty does have an impact on outcomes, but so does neglect — and they are independent. I think that's really important to understand that.

There is a lot of discussion of adverse childhood experiences leading to adverse long-term physical health outcomes. We also looked at physical health outcomes and, again, whether

it's neglect that is driving it. We did a multi-level prospective analysis looking at childhood neglect and childhood poverty and their relation to long-term physical health outcomes (Nikulina & Widom, 2014). We found differences between black neglected children and white neglected children. Childhood family poverty predicted increased risk for hypertension for blacks, but not for whites. In contrast, among whites, childhood neglect predicted elevated C-Reactive Protein (CRP), an indicator of a risk for heart attack. This paper is an attempt to say, is it the childhood poverty that's leading to these health outcomes or is it the neglect? And how does race fit into that problem? We really need to be paying more attention to race differences in consequences (Widom, Czaja, Wilson, Allwood, & Chauhan, 2012).

Dr. McCarroll: What can you tell us about your ongoing work with the data from the three generations of parents and children?

Dr. Widom: we will look at potential mediators that might explain the increased risk for maltreatment that we find in children of parents with histories of maltreatment. We will look at depression, alcohol and/or substance abuse, attachment, intimate partner violence and other outcomes may be some of the mechanisms that explain the intergenerational transmission of abuse and neglect. We are going to have to look at these relationships by type of abuse. We also want to ask what protects a parent with a history of abuse from becoming a perpetrator of neglect.

We have not gotten answers to those questions yet, although we are looking at several factors that might lead to better outcomes for abused and neglected children. For example, having a relationship, having strong support, is associated with better outcomes for maltreated children (Sperry & Widom, 2013). One would think, in terms of mental health outcomes, that there would also be a lower risk for abusing or neglecting your own children. Social support is one thing, but we have also found that graduating from high school, getting married and getting a job reduced the negative impact of child abuse and neglect on, for example, being arrested as an adult (Allwood & Widom, 2013). It may be that keeping abused and neglected children in school as long as possible could lead to better outcomes. We know that abused and neglected children are at greater risk of being truant, are more often suspended, and expelled.

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Summary of Dr. Widom's Research on the Intergenerational Transmission of Child Abuse and Neglect

By James E. McCarroll, PhD

Dr. Widom's research is the first multilevel longitudinal study to track how child abuse victims treat their children.

Adults with histories of childhood abuse and neglect are at increased risk for being reported to CPS for sexual abuse and neglect, but not for physical abuse.

It is often assumed that parents who were maltreated as children are more likely to maltreat their children compared to those without a history of maltreatment, a cycle of violence. Importantly, this is an uncommon outcome in this group. The assumption of increased risk has been challenged in scientific literature, perhaps beginning in 1987 (Kaufman & Ziegler, 1987), and continuing through Dr. Widom's research. The recent study by Dr. Widom and her colleagues is the first multilevel longitudinal study to track how child abuse victims treat their children (Underwood, 2015; Widom, Czaja, & DuMont, 2015). This complex research has documented a variety of outcomes, but has not supported the idea that physically abused parents will physically abuse their children. However, there was evidence that sexual abuse and neglect may occur in subsequent generations. Dr. Widom's interview expands on these points.

The study began in 1986 with a search of archival court records ($n=908$) of childhood physical and sexual abuse and neglect victims from ages 0–11 years during the years 1967–1971. These individuals were matched with a control group ($n=667$) from the same neighborhood for age, sex, race, and childhood neighborhood advantage and disadvantage and then followed for 30 years. The parents of these two groups of children are referred to as generation one—G1. The original participants in Widom's study are G2 and their offspring are G3. Interviews were started in 1989 when the G2s were, on average, 29 years old ($n=1,196$). Additional interviews were conducted in 2009 and 2010 with 649 G2 participants (average age=47 years) and with a subset of their offspring ($n=697$), G3, the third generation (average age=22.8 years). From 2011–2013, child protective service (CPS) records were searched for the entire sample.

Results of analyses of the G2 generation indicated that they were twice as likely to be reported to CPS for childhood abuse or neglect compared to the matched control group. About one fifth (21.4%) of the G2 parents who had been abused or neglected had been

reported to CPS for child maltreatment compared to 11.7% of the matched comparisons (adjusted odds ratio (AOR)=2.01, 95% confidence interval (CI)=1.42–2.85). However, as Dr. Widom explains further in her interview here, the results were surprising in that parents who had been physically abused as children were no more likely to physically abuse their own children than were the parents in the control group (AOR=1.26, CI=0.75–2.12, not statistically significant). However, sexual abuse and neglect were more likely to be experienced by the G3 offspring of G2s with histories of abuse or neglect. These results were statistically significant. Sexual abuse was experienced by 7.7% of the children of G2 abused parents compared to 3.4% of children of the G2 control group (AOR=2.31, CI=1.24–4.30). For neglect, the percentages were 18.0% for the abused group and 9.5% for the control group (AOR=2.06, CI=1.42–3.01). A larger percent of the G2 parents with a history of maltreatment reported that they had neglected their children (42.7%) than the non-abused comparison parents (29%). This difference was statistically significant (AOR=1.92, CI=1.29–2.86).

Finally, there was an additional assessment of the G3 generation through self-reports and CPS records of the behavior of the G2 parents, who might have been reluctant to report on their own maltreating behaviors. The G3 offspring of the G2 maltreating parents were significantly more likely to report having been sexually abused or neglected compared to parents without such history.

Dr. Widom indicated that these results show that adults with histories of childhood abuse and neglect are at increased risk for being reported to CPS for sexual abuse and neglect, but not for physical abuse compared with matched participants. A possible hypothesis from this finding is that parents previously known to the CPS system are more likely to receive increased scrutiny compared to parents who have not had such contact. As a result, abuse and neglect that occurs in this latter group may be under-reported to the authorities. Dr. Widom advises

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BUILDING BRIDGES TO RESEARCH

Mediators and Moderators

By James E. McCarroll, PhD, and Joshua C. Morganstein, MD

Much of behavioral science research is a search for variables that mediate or moderate the relationships between predictor variables and outcomes.

In her interview, Dr. Widom referred to mediators between child maltreatment and outcomes. One of her results was that parents with histories of neglect were at increased risk for neglecting their children. What affects this risk? Her research team will look at such possible mediators as depression, alcohol and other substance abuse, and intimate partner violence. Another possible mediator could be social support of the parent with the history of child neglect that functions to reduce the risk of maltreating their child.

Much of behavioral science research is a search for variables that mediate or moderate the relationships between predictor variables

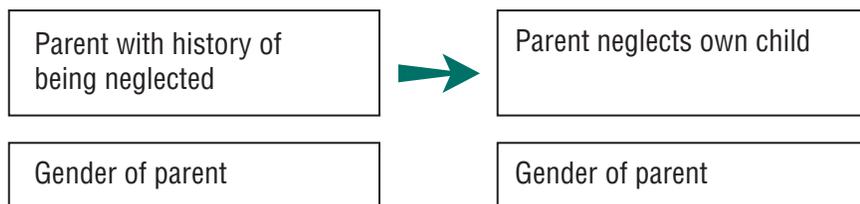
and outcomes. A mediator variable helps to account for the relationship between the two variables (predictor and outcome) while a moderator variable influences the strength of the outcome (Baron & Kenny, 1986). These important terms, often misused or used interchangeably, are very different concepts with important implications for the understanding of research procedures and results.

A mediator helps to explain *how* or *why* the relationship exists. In order for a factor to be a mediator, it must lie on the pathway between the independent variable (the factor you are interested in studying) and the dependent vari-

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Moderators explain what or in what subgroups certain relationships exist. Gender is often a moderator.

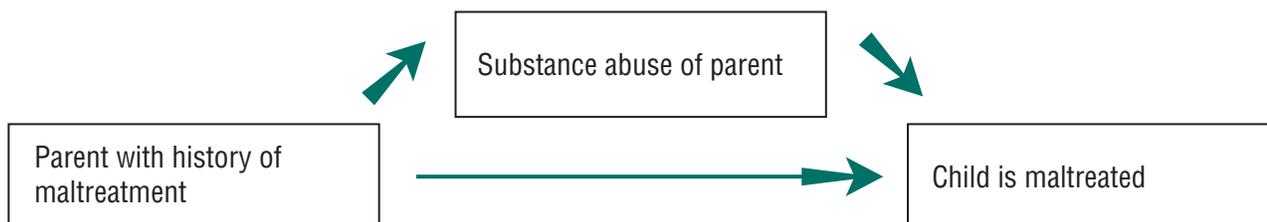
Example of a possible moderator in Dr. Widom's research



Dr. Widom found that parents with histories of neglect were at increased risk for neglecting their children. Possible moderators remain to be examined, but one such variable could be the gender of the parent or the child. Gender is not on the path shown above, but could affect the outcome such that one gender is neglected more than the other.

A mediator is a factor that explains how or why the relationship exists.

Example of a possible mediator in Dr. Widom's research



Dr. Widom's research will look for variables that mediate the relationship between child maltreatment and outcomes. Possible mediators could be depression, substance abuse, and intimate partner violence. In the example above, substance abuse, could be on the path between the predictor (parent with history of maltreatment) and the outcome (Maltreatment or child by parent with history of maltreatment).

Child Maltreatment and Developments in Neuroscience

By James E. McCarroll, PhD

Studies of the effects of maltreatment on outcomes, primarily child maltreatment, are frequently focused on neurobiological factors such as brain functioning, genetics, and their modification by the environment as well as by development.

Studies of the effects of maltreatment on outcomes, primarily child maltreatment, are frequently focused on neurobiological factors such as brain functioning, genetics, and their modification by the environment as well as by development. Research is conducted in a wide variety of fields of neuroscience. The fields of science involved in this research sometimes come with titles that might be somewhat off-putting to persons working in behavioral science. Nevertheless, increasing the understanding of how child maltreatment affects health and particularly mental health is an exciting new challenge for behavioral science. In each issue of JFJE, we will feature an important article that sheds light on understanding of these phenomena as well as tips for practice. In this issue, we feature Dr. Widom's research on a gene (MAOA) that encodes an enzyme that breaks down brain neurochemicals, chemicals

often treated in pharmacological treatment of mental illness. In addition to these articles we will provide some definitions of some of the terms that may be unfamiliar to many behavioral science clinicians and researchers.

Definitions of Terms Commonly Encountered in Research on Child Maltreatment and Genetics:

- **Genotype** — The genetic makeup of an individual.
- **Phenotype** — The observable and behavioral properties of an individual that are produced by the interaction of the genotype and the environment.
- **Epigenetic mechanisms** — The process by which modifications in how a gene functions (e.g., influences behavior, physiology, or anatomy) in response to environmental influences.

Building Bridges to Research, from page 5

If no relationship exists, then the hypothesized mediator does not lie on the causal path and hence cannot be a mediator.

able (the outcome). In order to be a mediator, a variable must demonstrate a significant degree of relationship between the independent and the dependent variable. If no relationship exists, then the hypothesized mediator does not lie on the causal path and hence cannot be a mediator. Specifically, in Dr. Widom's research, if a variable is found in the pathway between the independent variable (parent's history of neglect) and the outcome (risk of maltreating their child), that variable is a mediator.

A moderating variable helps to explain *what* or in what subgroups certain relationships exist. In other words, moderators help us understand if there are certain characteristics of people or environments that make the relationship between the independent variable and the outcome stronger or weaker. A moderator

may affect the direction or the strength of the relationship of interest. A moderating variable should have little or no statistical relationship to either the independent or the dependent variable. Gender is often a moderator.

Overall, moderators and mediators help us understand relationships. They can have important implications for the development of prevention and treatment interventions.

Reference

Baron R & Kenny D. (1986.) The moderator mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*; 51: 1173–1182.

Summary of Dr. Widom's Research, from page 4

greater attention to prevention and promoting well-being for all families, abused or not. She also noted the need for further studies to better understand the mechanisms underlying maltreatment as well as intervention.

References

Kaufman J & Ziegler E. (1987). Do abused children become abused parents? *American Journal of Orthopsychiatry*; 57(2): 186–192.

Underwood E. (2015). Measuring child abuse's legacy. *Science*; 347: 1408.

Widom CSW, Czaja SJ, & DuMont KA. (2015). Intergenerational transmission of child abuse and neglect: Real or detection bias? *Science*; 347: 1480–1485.

Interaction of Child Maltreatment with Monoamine Oxidase A (MAOA)

By James E. McCarroll, PhD

The environment affects how genes function. In this study, complex interactions were found between the MAOA gene, maltreatment, and sex. Activity of the MAOA gene interacted with participant sex and race on depressive symptoms and suggests the importance of genetic effects on mental health symptoms.

It is well known and generally accepted that child maltreatment leads to a wide variety of negative outcomes. As Dr. Widom stated in her interview, “The way we conceptualize the consequences of child abuse now, it is so broad. It is almost like it is an independent variable for every bad outcome that you can think of.” Research of child maltreatment in its multiple forms is often an exploration of whether some environmental factor (independent variable) can predict an outcome (dependent variable) and, if so, what might be done to change negative outcomes and promote positive ones.

Child maltreatment research includes explorations of how the body physiology such as the brain is affected. While this is not new, it has become much more sophisticated and includes such fields as neurochemistry and genetics. Genes produce proteins as well as many other substances that affect behavior. The environment affects how genes function. This is termed gene expression. MAOA is a gene that produces an enzyme that breaks down certain brain neurotransmitters, some of which have relationships to mental symptoms such as depression. If MAOA is influenced by child maltreatment, symptoms may be the result.

MAOA activity and its relation to child maltreatment was looked at in Dr. Widom’s prospective cohort study, largely the same participants as in her study of the intergenerational transmission of child maltreatment. As noted in the description of the intergenerational study, a sample of cases substantiated by courts for physical and sexual abuse and neglect and controls matched for age, sex, race, and approximate family socioeconomic circumstances were followed into adulthood. Children under the age of 12 years were recruited through archival records during the period 1967–1971. When the participants were an average age of 41 years, interviews were conducted to determine whether depressive symptoms were present and blood was collected for genetic analysis. There were no significant differences between the samples of the abused and neglected group and controls in race or sex indicating that the matching worked well. The samples, however, were skewed toward the lower socioeconomic stratum.

When blood and interview data were analyzed, complex interactions were found between the MAOA gene, maltreatment, and sex. For females, high activity of the MAOA gene acted as a risk factor suggesting greater vulnerability to depressive symptoms for those who were physically abused and multiply abused.

There was also an interaction for race, childhood sexual abuse, and the MAOA gene for the prediction of depressive symptoms. Low MAOA activity acted as a protective factor for whites, but high MAOA activity acted as a protective factor for nonwhites.

These are complex findings. While this study has limitations that warrant further exploration, such research gives clues to how people respond to maltreatment and suggest potential avenues for treatment.

As explained in the *Building Bridges to Research* article, the path from predictors to outcomes is influenced by variables that are related to both the predictor and the outcome (mediators) and by variables that are characteristics of people or environments that make the relationship between the predictor and the outcome stronger or weaker. One example of a moderator is the sex of an individual. In the article reviewed here, sex and race moderated the relationship between the MAOA genotype and mental health symptoms (Nikulina, Widom, & Brzustowicz, (2012).

Reference

Nikulina V, Widom CS, & Brzustowicz LM. (2012). Child abuse and neglect, MAOA, and mental health outcomes: A prospective examination. *Biological Psychiatry*; 71: 350–357.

“The way we conceptualize the consequences of child abuse now, it is so broad. It is almost like it is an independent variable for every bad outcome that you can think of.” — Dr. Widom

All of those experiences take them out of the normative process and give them more opportunities to feel badly about themselves, be influenced by delinquent peers, and get into trouble.

Dr. McCarroll: Negative socialization, if you will.

Dr. Widom: Exactly. Out of school, there are more opportunities to get in trouble and to get involved in the juvenile justice system. Once you get involved in the juvenile justice system, then there is a vicious cycle that occurs amongst some kids. So, we think that education is an important protective factor.

Regarding social support, we do not yet know whether these kids are pushing people away because of their behavioral problems such as their anxiety, or their depression, or their drinking, or alcohol problems, or whether they have lacked social support and that leads to some of these bad outcomes.

Dr. McCarroll: They may lack social skills to develop social support.

Dr. Widom: Exactly.

Dr. McCarroll: In your work with the groups of abused parents and non-abused parents, did you get any data on emotional abuse?

Dr. Widom: A little bit shows up in the CPS reports, but it's much more difficult to define and identify reliably. The original cases were from 1967 to 1971 and at that time, nobody was talking about emotional abuse or psychological maltreatment. Our documented cases are physical abuse, sexual abuse, and neglect.

Dr. McCarroll: You are in such a unique situation in a college of criminal justice. Most child maltreatment researchers are in pediatrics or mental health. You cross a lot of boundaries.

Dr. Widom: I started out as a traditional psychologist, but I became interested in psychopaths and in female offenders. That led me to an interest in child abuse and neglect. But, really, if you think about the way we conceptualize the consequences of child abuse now, it is so broad. It is almost like it is an independent variable for every bad outcome that you can think of.

Dr. McCarroll: What of the issue of childhood exposure to violence and intimate partner violence? Are you going to be able to do

anything with any data that you have on the intimate partner violence and its relationship to the intergenerational transmission of maltreatment?

Dr. Widom: We published papers on intimate partner violence in the abused and neglected children that we have been studying since the late 1980s (Widom, Czaja, & Dutton, 2013). We may have asked the older offspring whether they were involved in intimate partner violence and, if so, we may examine this in the future.

Dr. McCarroll: One of the issues that society has to deal with is the overlap of child maltreatment with intimate partner violence. If you consider exposure to intimate partner violence a type of abuse, it gets even more complex.

Dr. Widom: We had written a grant proposal to look at some of these questions in a focus on children exposed to violence, that is, the offspring of the people that we have been studying for all these years who have exposed their children to violence and partner violence. We have information about the parent's own violent behavior, and also whether they were engaged in intimate partner violence.

Dr. McCarroll: Was there any military connection in your samples, or did you have any way of ascertaining that?

Dr. Widom: We have a question about whether our individuals were in the military or served in the military. That was another finding that was surprising. We found very few that reported military experience. I do not know whether the military had higher standards. Because many of our people have fairly low IQ's and fairly low reading abilities (Perez & Widom, 1994), it is possible that they were not eligible or not qualified. We thought that being in the military would be a protective experience.

Dr. McCarroll: Thank you for your time here and for your work. I look forward to continuing to work with you, to shed some light on all of these important questions.

Dr. Widom: You are welcome.

References

Allwood MA, & Widom CS. (2013). Child abuse and neglect, developmental role attainment and adult arrests. *Journal of Research in Crime and Delinquency*; 50(4): 551-578.

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Brief Summary of Dr. Widom's Child Maltreatment Research

By James E. McCarroll, PhD

In her writing, Dr. Widom has almost always included recommendations on the need for the prevention of child abuse and neglect.

Dr. Widom's research career is extensive. We can only provide illustrative examples of her work. Unlike many psychologists, she has published widely in journals describing criminal behavior as well as the more standard journals of psychology and psychiatry. Her early research was on psychopaths (Widom, 1976) and later on female offenders (Widom, 1978). This research led her to her long time interest in child abuse and neglect and understanding the complexities of the concept "cycle of violence." In an early review of the literature on the "cycle" she found that the evidence that abuse leads to abuse was sparse (Widom, 1989a). In addition to questioning the validity of the "cycle" this review captured many of the issues that are still awaiting more definitive research. Among these are the long-term consequences to a child of an abusive home environment and the need to consider neglect separately from abuse (although this is methodologically difficult because of their overlap). In addition to reviewing the literature on the "cycle" she noted other possible effects of abuse on children such as the effects of witnessing marital violence, delinquency, depression, withdrawal, and self-harm. She stressed the need for improved methodology including the use of control groups and base rate information. Finally, she admonished the field to not persistently transmit what appear to be confident conclusions on the "cycle of violence" with little regard to data or its absence. She further noted the need to determine why some children do not succumb to negative outcomes of abuse and neglect and learn the workings of protective factors such as dispositional attitudes, environmental conditions, biological predispositions, and positive events that may militate against or mitigate negative outcomes for abused children.

Widom continued her literature reviews on the "cycle" in a paper in which she referred to the intergenerational transmission of violence as "the premier developmental hypothesis in the field of abuse and neglect" (Widom, 1989b). In this more technical paper, she continued her review of the literature on the effects of childhood abuse and neglect on adult outcomes, but also presented the design and results from her longitudinal study, described more fully in

this edition of *Joining Forces Joining Families*. Using arrest records, she found that abused and neglected children had a higher likelihood of arrests for delinquency, adult criminality, and violent criminal behavior than the matched controls. She advised caution in that a large portion of such children do not later become antisocial and violent and that the links between childhood abuse and these negative outcomes are far from certain. For example, 26% of child abuse and neglect victims had juvenile offenses while 74% did not; 11% had an arrest for a violent act, almost 90% did not.

In her writing, Dr. Widom has almost always included recommendations on the need for the prevention of child abuse and neglect. In a review paper of child abuse prevention programs, physical abuse and sexual abuse prevention programs were described separately (Olsen & Widom, 1993). Among the physical abuse prevention programs, they cited the importance of home visitation and family or community support centers, programs for pregnant and parenting teenagers, individual counseling, and support groups. Many of these programs are multi-component meaning that they are not exclusively of one type, such as home visitation. For example, a program for incarcerated offenders who wished to improve their parenting skills was an example of a program not specifically directed at abusers. Sexual abuse prevention programs are usually directed toward children's ability to protect themselves. The authors also stressed the importance of the prevention of neglect, a type of maltreatment with little research although at that time it constituted approximately two-thirds of all cases of child maltreatment. A final comment in this paper brought attention to possible negative effects of child abuse prevention programs, a topic not frequently seen in current literature. Children in sexual abuse prevention programs may develop distrust of nurturing or touching and post-program anxiety. Adverse effects on children of these programs are unknown and should be considered in research design. Finally, they noted potential methodological shortcomings of prevention research including the lack of clear articulation of goals, criteria for inclusion,

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Understanding the processes of the development of resilience among abused and neglected children is as important as understanding the pathways that lead to negative outcomes.

rigorous evaluation involving random assignment to treatment conditions, pre- and post-test assessments and long-term follow-up.

Dr. Widom has continued to pursue the connections between early childhood abuse and neglect and negative adult outcomes using the longitudinal data described in her interview. This prospective cohort design allowed her to investigate possible links between abuse and neglect and promiscuity, prostitution, and teenage pregnancy (Widom & Kuhns, 1997). She found that child abuse and neglect were significant predictors of prostitution for females, but were not associated with increased promiscuity or teenage pregnancy. In addition, young women who are neglected and become runaways on the street are at risk of being victimized or enticed into prostitution.

In a significant article dedicated to improving prevention of later delinquent and adult criminal behavior, Dr. Widom proposed long-range strategies and opportunities for interventions (Widom, 1998). Intervening early, even prenatally, can prevent malnutrition and physical abuse, both of which can adversely affect development. Interventions to prevent neglect are important for two reasons: it is associated with later criminal behavior and it imposes the largest burden on the child protective services agencies. Because it tends to be chronic, neglect may be easier to affect than physical abuse, which can be episodic and explosive. Prevention should be based on the needs and the development of the child; one size does not fit all. While surveillance is a key part of prevention, surveillance may expose lower socio-economic groups to more scrutiny and likelihood of appearing before child protection services than children from more affluent families. Close surveillance can also result in discrimination of these children affecting their self-esteem and exacerbating the effects of victimization. Resources must be made available to those families that need them. Barriers to accessing resources can include lack of transportation, language, cultural insensitivity, location, and stigma, among others.

The relation of childhood abuse and neglect to the development of adult posttraumatic stress disorder (PTSD) is highly relevant to today's society in which large numbers of persons have been deployed to war zones. In her longitudinal sample, childhood victimization was associated with the risk for lifetime and current PTSD; however, these relationships were complex (Widom, 1999). Childhood

abuse or neglect were significant predictors of the number of PTSD symptoms in a multivariate model, but also significant were other variables: parent arrested; parent had drug problem; separated, widowed, or divorced; less than a college degree; and diagnosis of alcohol or drug abuse or dependence. These results indicate that exposure to certain types of environments may be especially conducive to the development of PTSD. It was also noted, in contrast, that growing up in homes characterized by poverty and having a large family were not associated with increased risk for PTSD. Finally, in examining the relationship of abuse and neglect to lifetime PTSD symptoms, sexual abuse was highly significant in predicting PTSD symptoms; physical abuse and neglect were marginally significant. In addition, childhood behavior problems were a significant predictors of adult PTSD diagnosis and symptoms.

Understanding the processes of the development of resilience among abused and neglected children is as important as understanding the pathways that lead to negative outcomes. In her study of abused and neglected children grown up, resilience was operationalized as meeting the criteria for success across six of eight domains of adult functioning: employment, homelessness, education, social activity, psychiatric disorder, substance abuse, and two domains of criminal behavior — arrest and self-reports of violence. Twenty-two percent of abused and neglected individuals met these criteria; more females were successful across a greater number of domains than males (McGloin & Widom, 2001).

Childhood abuse and neglect were significantly related to adult intimate partner violence (IPV) in both men and women (White & Widom, 2003). Overall, there was a link between early childhood victimization and later perpetration of IPV for both men and women. Both males and females reported significantly higher rates of ever hitting or throwing things at a partner than matched controls. When mediation analyses were conducted of the relationships between childhood abuse and neglect and adult IPV, it was found that antisocial personality disorder mediated the effects of abuse or neglect on IPV for both men and women. Hostility and alcohol problems mediated the effects for abused and neglected women. The result of these analyses was that the effects of abuse and neglect were reduced to non-significance for both men and women. These findings show

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Nikulina V, & Widom CS. (2014). Do race, neglect, and childhood poverty predict physical health in adulthood? A multilevel prospective analysis. *Child Abuse & Neglect*; 38(3): 414–424.

Perez C, & Widom CS. (1994). Childhood victimization and long term intellectual and academic outcomes. *Child Abuse & Neglect*; 18(5): 617–633.

Sperry DM, & Widom CS. (2013). Child abuse and neglect, social support, and psychopathology in adulthood: A prospective investigation. *Child Abuse & Neglect*; 37(6): 415–425.

Widom CS, Czaja S, & Dutton MA. (2013). Child abuse and neglect and intimate partner violence victimization and perpetration: A prospective examination. *Child Abuse & Neglect*; 38(4):

Widom CS, Czaja S, Wilson HW, Allwood M, & Chauhan P. (2012). Do the long-term consequences of neglect differ for children on different races and ethnic backgrounds? *Child Maltreatment*; 18(1): 42–55.

Widom CSW, Czaja SJ, & DuMont KA. (2015). Intergenerational transmission of child abuse and neglect: Real or detection bias? *Science*; 347: 1480–1485.

Brief Summary of Dr. Widom's Research,
from page 10

This review highlights much of Dr. Widom's early research on the relationships between childhood abuse and neglect, negative and positive outcomes, and prevention of childhood maltreatment.

that it is the behavior in adulthood that is more closely related to IPV than the more remote effects of the earlier childhood abuse and neglect. However, there was a link between childhood abuse and neglect and the mediating variables, antisocial personality disorder for both men and women and alcohol problems and hostility for women.

This review highlights much of Dr. Widom's early research on the relationships between childhood abuse and neglect, negative and positive outcomes, and prevention of childhood maltreatment. Much more research is forthcoming from her longitudinal sample of now grown men and women who were abused or neglected as children and the matched controls. We look forward to these results.

References

McGloin JM, & Widom CS. (2001). Resilience among abused and neglected children grown up. *Development and Psychopathology*; 13: 1021–1038.

Olsen JL, & Widom CS. (1993). Prevention of child abuse and neglect. *Applied and Preventive Psychology*; 2(4): 217–219.

White HR, & Widom CS. (2003). Intimate partner violence among abused and neglected

children in young adulthood: The mediating effects of early aggression, antisocial personality, hostility and alcohol problems. *Aggressive Behavior*; 29: 332–345.

Widom CS. (1976). Interpersonal conflict and cooperation in psychopaths. *Journal of Abnormal Psychology*; 85(3): 330–334.

Widom CS. (1978). An empirical classification of female offenders. *Criminal Justice and Behavior*; 5(1): 35–52.

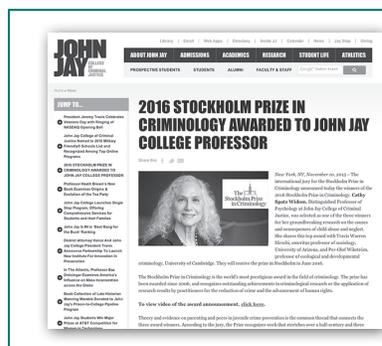
Widom CS. (1989a). Does violence beget violence? A critical review of the literature. *Psychological Bulletin*; 106(1): 3–28.

Widom CS. (1989b). The cycle of violence. *Science*; 244:160–166.

Widom CS. (1998). Child victims: Searching for opportunities to break the cycle of violence. *Applied and Preventive Psychology*; 7: 225–234.

Widom CS. (1999). Posttraumatic stress disorder in abused and neglected children grown up. *American Journal of Psychiatry*; 156(8): 1223–1229.

Widom CS, & Kuhns JB. (1997). Childhood victimization and subsequent risk for promiscuity, prostitution, and teenage pregnancy: A prospective study. *American Journal of Public Health*; 86: 1607–1612.



2016 Stockholm Prize in Criminology

For information on Dr. Widom's award of the 2016 Stockholm Prize in Criminology, see :
<http://www.su.se/english/about/prizes-awards/the-stockholm-prize-in-criminology/criminology-prize-winners-2016-1.255296>

Websites of Interest

This issue of JFJF has emphasized the research of Cathy Spatz Widom, PhD, on the intergenerational transmission of child maltreatment. Dr. Widom has conducted extensive research in child neglect. She was the principal investigator of the National Institute of Health's (NIH) Translational Research on Child Neglect Consortium. For a description of the Consortium, which still exists as a working group, please see Boyce and Maholmes (2013) and Widom (2013).

The Social Policy Report is an excellent summary of biological factors in child maltreatment. The focus of this document is the toxic effect of child abuse and neglect and their effects on brain function, the immune system, and mental and physical health. The neuroscience implications of child abuse and neglect are clearly explained with diagrams and extensive references.

http://www.srcd.org/sites/default/files/documents/spr_28_1.pdf

The NIH Office of Behavioral and Social Sciences Research (OBSSR) gives information on current research on child neglect. This publication lists child neglect research grants by title with an abstract, which is helpful for readers who want to search for publications on the topics that have been funded. There are also news items and a calendar of OBSSR events.

https://obssr.od.nih.gov/funding_opportunities/requests_for_applications/child_neglect_RFA.aspx

References

Boyce CA, & Maholmes V. (2013). Attention to the neglected: Prospects for research on child neglect for the next decade. *Child Maltreatment*; 18(1): 65–68.

Widom CS. (2013). Translational research on child neglect: Progress and future needs. *Child Maltreatment*; 18(1): 1–7.

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Social Policy Report

The Biological Embedding of Child Abuse and Neglect
Implications for Policy and Practice

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Abstract

Each year within the US alone over 770,000 children are victimized by abuse and neglect (US Department of Health and Human Services, 2010), and this figure is likely to underestimate the extent of the problem. Researchers have long recognized that maltreatment has adverse effects on children's mental health and academic achievement. Studies of adults show that adverse childhood experiences like maltreatment increase risk for chronic diseases of aging, including Type II diabetes and cardiovascular disease. What the field does not fully understand is why maltreatment has such pervasive effects. Studies on the neuroscience of maltreatment have begun to offer some clues. Victims of maltreatment differ from non-victims with respect to brain structure and function, hypothalamic-pituitary-adrenal (HPA) axis and autonomic nervous system function, immune function, and epigenetic markers. These studies identify potential mechanisms by which maltreatment increases risk for poor mental and physical health and poor school performance by affecting systems that subserve memory, attention, the response to stress, and inflammation. The findings highlight the importance of broadening the scope of child welfare beyond child protection to include child well-

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Office of Behavioral and Social Sciences Research

20th Anniversary

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NEWS

Selection of Dr. William T. Riley as the Director of the Office of Behavioral and Social Sciences Research, NIH
July 20, 2015

OBSSR 20th Anniversary Celebration
April 09, 2015

2015 Training Institute for Dissemination and Implementation Research in Health
April 10, 2015

2015 UCLA Summer Institute on Health Health (In)Health Technology Research
February 23, 2015

Just out: Social Science and Medicine Research Special Issue: Educational Attainment and Adult Health
Communities: Capacity Supported by OBSSR
February 10, 2015
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CALENDAR

November 5, 2015
OBSSR Lecture Series - Video Games and Neuroscience: A Matter of Life or Death
2:00pm - 3:00pm
Bethesda, MD

December 4, 2015
OBSSR Lecture Series - Good Behavior, Character, and Decency
Research Yields
2:00pm - 3:00pm
Bethesda, MD

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Home > Research > Requests for Applications

Research on Child Neglect

Background

In March 1999, the National Institutes of Health (NIH) announced a special trans-NIH, interdepartmental Request for Applications (RFA CD-99-006) focusing on *Research on Child Neglect* for FY 2000. This initiative encouraged research on the etiology, extent, services, treatment, management, and prevention of child neglect. This Request for Applications (RFA) was intended to stimulate the development of programs of child neglect research at institutions that currently have strong research programs in related areas (e.g., child development, injury prevention, developmental neurobiology, child abuse, substance abuse, population research, craniofacial and dental public health, health services) but are not engaged in extensive research focusing on child neglect. A second goal of this RFA was to bring the expertise of researchers from the child health, education, and juvenile justice fields into the child neglect research field and to promote their collaborations with each other and with child neglect and abuse researchers.

This RFA, coordinated under the auspices of the NIH Child Abuse and Neglect Working Group (CANWG), was a joint effort of several components of the NIH, including the Office of Behavioral and Social Sciences Research, the National Institute on Alcohol Abuse and Alcoholism, the National Institute of Child Health and Human Development, the National Institute of Dental and Craniofacial Research, the National Institute on Drug Abuse, the National Institute of Mental Health, and the National Institute of Neurological Disorders and Stroke. Joining with NIH in this groundbreaking endeavor are the Children's Bureau of the Administration on Children, Youth and Families, the National Institute of Justice, and the Office of Juvenile Justice and Delinquency Prevention, both within the Office of Justice Programs, Department of Justice, and the Office of Special Education Programs, within the Department of Education. The co-sponsors pledged by over \$3,000,000 annually for these five year grants.

The NIH Child Abuse and Neglect Working Group (CANWG) was established in response to a recent directive by the House Committee on Appropriations, which requested that NIH report on current NIH efforts, accomplishments, and future plans for research on child abuse and neglect. The CANWG's subsequent 1998 report recommendations were based on both an analysis of the NIH portfolio as well as on the 1993 National Academy of Sciences (NAS) report, *Understanding Child Abuse and Neglect*. The NAS report included knowledge about the origins, consequences, treatment and prevention of child maltreatment among its research priorities. Child neglect was also noted as a high priority research area in the 1998 Institute of Medicine report, *Violence in Families: Assessing Prevention and Treatment Programs*. This RFA is also responsive to recommendations from the October 1997 National Institute of Justice Child Abuse and Neglect Interventions Strategic Planning Workshop, as well as a June 1993 National Center for Child Abuse and Neglect-sponsored symposium on chronic neglect.

A technical assistance workshop was held in Bethesda, MD for all interested parties in July, 1999. Approximately 120 investigators attended this trans-NIH meeting. Seventy-two applications were reviewed in January, 2000. Of these, 16 grants were selected for award. To form the core research site participants in the *Federal Child Neglect Research Consortium*, a summary of these grants appears below.

Research Grants

Neglect, Adolescents, and Alcohol Use Disorders
Doreen Clark
Western Psychiatric Institute and Clinic, Pittsburgh, Pennsylvania.

Resources for Help with Intimate Partner Violence (IPV), PTSD, and More

The National Center for PTSD, a resource of the Department of Veterans' Affairs (VA), publishes a monthly update on issues of trauma and posttraumatic stress disorder (PTSD) <http://www.ptsd.va.gov/about/subscribe.asp>. Subscribers to this free service receive a monthly update. A wide variety of resources are available for providers, researchers, and other subscribers. The subject of the October 2015 issue is PTSD and IPV. Links are provided for information about both subjects as well as the numbers for help lines for IPV (800-799-7233) and the National Sexual Assault Hotline (800-

656-4673). Free continuing education credits are available to providers outside the VA in the form of a lecture series. The publication also briefly notes research underway at the Center and news about events of interest. An example is the story about infidelity and its effects on Soldiers' and veterans' relationships and mental health. This article was by Miranda Escobar and appeared in the 6 October 2015 issue of the Yale News. This resource is a quick and easy way to be informed of current developments affecting military personnel and veterans and their families.