

# **TEARING DOWN THE WALL:**

## **PROBLEMS WITH CONSISTENCY, VALIDITY, AND ADVERSE IMPACT OF PHYSICAL AGILITY TESTING IN POLICE SELECTION**

### **National Center for Women & Policing**

a division of the Feminist Majority Foundation

**Dr. Kim Lonsway**, Research Director, National Center for Women & Policing

**Katherine Spillar**, Executive Vice-President, Feminist Majority Foundation

**Sharyn Tejani**, Legal Director, Feminist Majority Foundation

**Patricia Aguirre, Hannah Dupes** Research Associates, National Center for Women & Policing

**Margaret Moore**, Director, National Center for Women & Policing

**Chief Penny Harrington**, Founding Director and Chair of the Board,  
National Center for Women & Policing

**Eleanor Smeal**, President, Feminist Majority Foundation

*Spring 2003*

*THE FULL REPORT OF THIS RESEARCH IS SCHEDULED TO  
APPEAR IN POLICE QUARTERLY (2003), ISSUE #3.*

# **TEARING DOWN THE WALL: PROBLEMS WITH CONSISTENCY, VALIDITY, AND ADVERSE IMPACT OF PHYSICAL AGILITY TESTING IN POLICE SELECTION**

**T**he job of policing is widely assumed to require a great deal of physical prowess, and this is often used to keep women out of law enforcement jobs. The mythology – and accompanying physical mandates for law enforcement candidates – persist despite a voluminous body of research that documents the sedentary nature of police work and poor physical fitness among in-service law enforcement personnel. This summary report briefly reviews the existing literature on women's performance as police officers, the physical demands of police work, and the use of physical agility testing in police selection.

A survey was conducted with 62 police agencies to provide information regarding their physical agility testing protocol and representation of women within sworn personnel. Results indicate that the vast majority (89%) utilize some form of physical agility testing for entry-level selection. The study also documents that agencies without a test have 45% more sworn women than those with such a test (15.8% vs. 10.9%). Results also demonstrate a striking lack of agreement – or standardization -- regarding the physical capabilities that should be tested and the criteria that should be used to evaluate successful performance. This summary report concludes by reviewing alternatives for physical agility testing in police officer selection.

## INTRODUCTION

Until the late 1970's, many police agencies utilized minimal height requirements and weight standards as part of their selection criteria. These standards screened out a disproportionate number of women from the selection process, but failed to predict either the safety or successful performance of officers in terms of injuries, citizen complaints, accidents, assaults, and commendations.<sup>1</sup> The courts therefore rejected such standards as discriminatory under Title VII of the 1964 Civil Rights Act.<sup>2</sup> Since that time, physical agility tests have largely replaced the old height and weight standards as a screening device for police officer candidates. These tests typically also have a negative impact on women. In fact, the negative effect of physical agility testing on women is often so severe that some commentators have speculated that its very purpose is to screen out female applicants across the board.

Yet research has consistently documented that women not only perform the job of policing as successfully as their male colleagues, but also that female officers utilize a style of policing that relies less on physical force and more on communications skills.<sup>3</sup> As a result, women are often better at defusing potentially violent confrontations, and are less likely to become involved in use of excessive force situations (see footnote 3). In fact, no matter which measure of excessive force is used -- citizen complaints, sustained allegations, or civil liability payouts -- the pattern is both dramatic and consistent. Women are substantially less likely to be named in a citizen complaint, sustained allegation, or civil lawsuit for excessive use of force.<sup>4</sup> Thus, the under-representation of women in policing is a significant contributing factor to the problem of police brutality that plagues agencies across the country and damages police-citizen relations.

The under-representation of women in law enforcement also has significant implications for women in the community who are victims of domestic violence. Research shows that women officers respond more effectively to domestic violence incidents -- which constitute approximately half of all violent crime calls to the police. Moreover, studies have found that up to 40% of police officers commit domestic abuse themselves. In other words, 4 in 10 officers responding to the scene of a domestic violence incident may themselves be abusers (see footnote 3). The overall quality of police response to cases of violence against women would almost certainly improve by increasing the numbers of women in law enforcement.

To recruit successful female officers, however, it is critical that police agencies remedy the disproportionate negative impact of physical agility testing on women versus men in the selection process. The EEOC states that adverse impact of a selection test is established when a plaintiff documents that passing rates for women fall below 80% of men's.<sup>5</sup> At that point, the legal burden shifts to the police agency to prove that the test is job related and consistent with business necessity, and that it represents the least discriminatory alternative for selection. Even if an agency successfully defends the job relatedness and business necessity of its physical test, it will still be legally liable if a plaintiff is able to show that an alternative exists that serves

---

<sup>1</sup> Evans, D.H. (1980). Height, weight, and physical agility requirements -- Title VII and public safety employment. *Journal of Police Science and Administration*, 8 (4), 414-436.

<sup>2</sup> *Dothard v. Rawlinson*, 433 U.S. 321(1977).

<sup>3</sup> For a review of the research on the many advantages that women bring to policing, see "Hiring and retaining more women: The advantages to law enforcement agencies," prepared by the National Center for Women & Policing. Available at <http://www.womenandpolicing.org/HiringAdvantage.pdf>.

<sup>4</sup> Lonsway, K., Wood, M. & Spillar, K. (2002). Men, women and police excessive force: A tale of two genders. Manuscript to appear in December issue of *Law & Order* magazine.

<sup>5</sup> Equal Employment Opportunity Commission, 29 CFR Ch. XIV, Subpart D, 7-1-01 Edition.

the employer's business needs but has less adverse impact.<sup>6</sup> For a detailed review of the various strategies used by police agencies to demonstrate the job relatedness of their physical agility test, see the corresponding technical report.<sup>7</sup>

## NATIONAL REVIEW OF PHYSICAL AGILITY TESTING

In light of the issues reviewed above, research was conducted to document the prevalence of physical agility testing in a random sample of law enforcement agencies, to determine whether such testing is associated with a decreased representation of sworn women, and to study whether there was any consensus as to the physical abilities that should be examined and the cutoff scores required. As part of the *2001 Status of Women in Policing Survey*, a random sample of 360 law enforcement agencies was identified from the 1997 *Law Enforcement Management and Administrative Statistics*<sup>8</sup> as having 100 or more sworn officers. Of these 360 agencies, 257 responded with information regarding their representation of women, for an excellent response rate of 71.4%.<sup>9</sup> These 257 agencies were then surveyed regarding their physical agility testing protocol. Data were provided by 62 agencies, including 38 city, 21 county, and 3 state police organizations.

### Representation of Sworn Women

After weighting the data to represent the breakdown of agency size and type in the 1997 *Law Enforcement Management and Administrative Statistics*, the results reveal that women accounted for only 12.7% of sworn law enforcement positions in large agencies nationwide in 2001. This figure is less than four percentage points higher than in 1990 when women comprised 9% of sworn officers.<sup>10</sup> The data also indicate that the representation of women in large police agencies actually declined, from 14.3% in 1999 to 13.0% in 2000 and 12.7% in 2001 (see footnote 9). Information regarding the representation of sworn women was then linked to information about the physical agility test used by each responding agency.

### Physical Agility Testing Protocols

Of the 62 agencies providing detailed information, the vast majority (88.7%) utilize some form of physical agility testing for entry-level selection. This includes 100% of the state agencies, 94.7% of the city agencies, and 76.2% of the county agencies. Almost all of the agencies (89.1%) score the test simply on a pass/fail basis, so candidates must successfully perform the physical agility component before moving on to the next stage of entry-level selection. There is therefore a degree of unanimity among those surveyed on the use of a test

---

<sup>6</sup> For a review of the many legal issues involved in physical agility testing for entry-level selection in policing, see *Recruiting and Retaining Women: A Self-Assessment Guide for Law Enforcement*. Prepared by the National Center for Women & Policing, with funding from the Bureau of Justice Assistance (Grant #99-LD-VX-0003). NCJ #188157. Available from [www.ncjrs.org](http://www.ncjrs.org).

<sup>7</sup> "Tearing Down the Wall: Problems with Consistency, Validity, and Adverse Impact of Physical Agility Testing in Police Selection." Available from the National Center for Women & Policing, a division of the Feminist Majority Foundation.

<sup>8</sup> Bureau of Justice Statistics (1997). *Law Enforcement Management and Administrative Statistics*. Available at <http://www.ojp.usdoj.gov/bjs/lawenf.htm>.

<sup>9</sup> For more information, see "Equality Denied: The Status of Women in Policing 2001" Prepared by the National Center for Women & Policing. Available at [http://www.womenandpolicing.org/2002\\_Status\\_Report.pdf](http://www.womenandpolicing.org/2002_Status_Report.pdf).

<sup>10</sup> Bureau of Justice Statistics (1990). *Law Enforcement Management and Administrative Statistics*. Available at <http://www.ojp.usdoj.gov/bjs/lawenf.htm>.

with a standard of pass/fail, however there was no consistency regarding the cutoff score or how scores should be combined.

More revealing, there was no consensus on the types of physical test that should be used – on its face raising serious questions about the usefulness of physical tests in predicting candidate performance as an officer. Of the 55 agencies that use physical agility testing, 26 (47.3%) include some type of timed obstacle course. Twenty-eight agencies use only stand-alone events, of which 20 (71.4%) require the candidate to pass each component individually and 7 (25.0%) combine the scores from components (one agency did not indicate how successful performance was determined). Less than one-third of the agencies use gender norming (27.3%) and/or age norming (25.5%) as part of their scoring procedure. The following table summarizes the results regarding the specific physical agility test components utilized by these agencies.

### Physical Agility Test Components Used by Responding Departments (N = 55)

Test Component	General Category	Number of Agencies	Number in Timed Obstacle Course
Other Run (not 1.5 mile)	Running	27	13
Dummy Drag	Upper Body	27	18
Solid Wall Climb	Upper Body	25	19
Sit-Ups	Miscellaneous	23	0
Agility Run	Running	21	19
1.5 mile run	Running	20	0
Push-Ups	Upper Body	19	0
Sit and Reach Flexibility	Flexibility	18	0
Grip Strength/Trigger Pull	Miscellaneous	16	10
Stairs	Agility	14	10
Under Low Barrier	Agility	14	13
Over Low Hurdle	Agility	13	11
Chain Link Fence	Upper Body	10	6
Ditch Jump	Agility	10	8
Upper Body	Upper Body	7	4
Window Opening	Agility	7	7
Ladder Climb	Agility	6	5
Enter/Exit Vehicle	Miscellaneous	6	6
Balance/Stability	Balance/Stability	5	4
Bench Press	Upper Body	5	0
Vehicle Push	Upper Body	5	4
Victim Carry	Upper Body	4	1
Vertical Jump	Lower Body	3	0
Ammunition Load	Miscellaneous	2	2
Leg Press	Lower Body	2	0
Suspect ID	Miscellaneous	2	2
Stationary Bike	Miscellaneous	1	0
Swimming	Miscellaneous	1	1

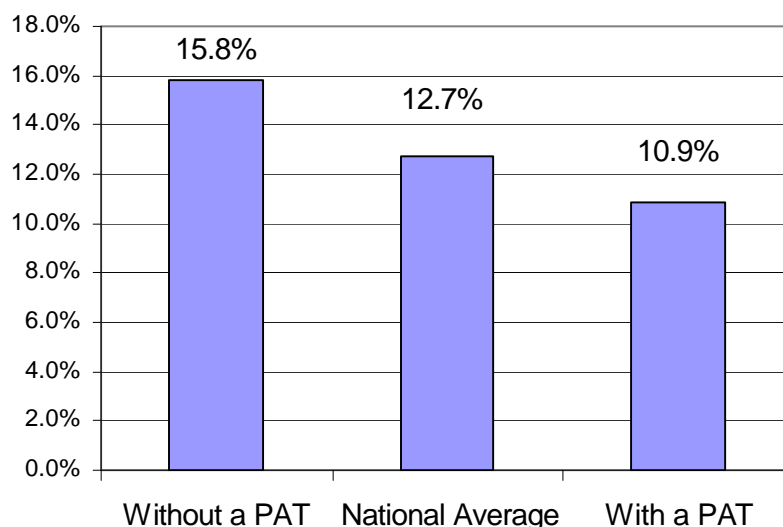
Source: NCWP, 2003 (footnote 7). Test components are listed in order of decreasing frequency.

Overall, the most common test components were running events, a dummy drag, a solid wall climb, sit-ups, push-ups, and a sit-and-reach flexibility test, all of which were utilized by more than 30% of responding agencies. Other events used by at least 10% of the responding agencies included a test of grip strength or trigger pull, a chain link fence climb, or other measure of upper body strength. A variety of agility tests were also reported, including stairs, low barriers, low hurdles, ditch jump window opening, and entering or exiting a vehicle. The individual test components can be grouped according to whether they test primarily running, agility, upper body strength, lower body strength, balance/stability, flexibility, or miscellaneous events. More detailed information on the nationwide review of physical agility protocols is available in the corresponding technical report (see footnote 7).

### Negative Effect of Physical Agility Testing on Women's Representation

Of the 62 agencies providing information on their physical agility testing protocol, information on the representation of sworn women was available for 59. It was therefore possible to determine whether the existence of a physical agility test predicts a decreased representation of women on these agencies. Overall, there was a significant negative effect of physical agility testing on the representation of sworn women,  $t(57) = 2.04$ ,  $p < .05$  (see figure below). The difference amounted to almost five full percentage points. Agencies with no physical agility test reported having 15.8% sworn women whereas those with such a test had 10.9% -- representing a 45% increase in the representation of sworn women. As the figure below illustrates, the representation of sworn women in agencies without a physical agility test (PAT) is significantly higher than the national average. In contrast, the representation of sworn women in agencies with a physical agility test (PAT) is significantly lower than the national average.

**Physical Agility Tests and the Representation of Sworn Women**



Source: NCWP, 2002 (footnote 7) and NCWP, 2001 (footnote 9).

## **Discussion of Survey Results**

The present research provides empirical support for a number of conclusions regarding physical agility testing for entry-level police selection. First, the results confirm the widespread use of physical agility testing with the vast majority of police agencies using some form of physical agility testing as part of their entry-level selection process. Overall, 88.7% of the surveyed agencies reported using a physical agility test, including 100% of state agencies, 94.7% of city agencies, and 76.2% of county agencies.

Second, the research documents striking variety in the specific protocols used for entry-level physical agility testing. The table summarizes the wide range of physical activities used in tests across the country, and the corresponding technical report describes the dramatic variation in standards of performance that are required. Given the vast ranges discovered even in this small sample, it is difficult to understand how any department justifies the use of any physical test, much less one that drastically reduces the number of qualified women applicants it can consider. No one event was used by a majority of the departments, and even with the same event, no one standard for "success" was found.

Third, the research highlights the dubious nature of the existing entry-level events used by some police agencies in their physical agility tests. For example, skepticism -- and perhaps even alarm -- is warranted when a police agency requires applicants to successfully load an assault rifle as part of their selection test. There is also some question regarding the appropriateness of other test components such as the dummy drag, wall climb, and vehicle push. This is particularly apparent with the test that requires candidates to drag a dummy down a flight of stairs to a waiting ambulance and the one that offers candidates a choice between climbing a 6-foot solid wall or 6-foot chain link fence.

Finally, some of the physical agility test components underscore the inappropriateness of assessing skills that will be taught as part of the training academy. Loading or firing a weapon is perhaps the most obvious example of a skill that must be taught to police officers during their initial training, and one that is therefore best tested after having learned the proper techniques. The same argument holds true for any test designed to simulate physically apprehending a resistant subject. This ability is probably best assessed after officers have learned effective techniques as part of their academy training. For a more detailed review of the research results and discussion of their implications, please see the corresponding technical report (footnote 7).

## **ALTERNATIVES FOR PHYSICAL AGILITY TESTING**

Given the lack of consistency and validity in physical agility testing protocols, it is important to review the various alternatives that are available to reduce the negative effect on women applicants. As a legal matter, a selection device may be successfully challenged under Title VII of the 1964 Civil Rights Act if the plaintiff shows that less discriminatory alternatives exist. In some cases, an employer may even be required to proactively search for such alternatives with less adverse impact.<sup>11</sup>

---

<sup>11</sup> *Officers for Justice v. Civil Service Commission of San Francisco* 979 F.2d 721 (9<sup>th</sup> Cir. 1992).

## No Physical Testing

Of course, one alternative that would completely eliminate the negative effect of physical agility testing is to remove it from the selection procedure entirely, especially given its lack of predictive power and thus its very value as a screening test. Instead, police agencies could devote resources to selection procedures such as an assessment center which has been demonstrated to predict successful job performance without any discriminatory impact on minority candidates.<sup>12</sup> Although some have issued dire predictions for abandoning physical fitness requirements, the reality is that many police agencies (especially smaller agencies) select candidates without any physical test. Research indicates that 20-33% of city agencies and 9-16% of state agencies do not use such a test.<sup>13</sup> Eliminating the physical agility test as an entry-level screening device is therefore one option that police administrators should seriously consider. With this approach, police departments typically require a medical examination and do the requisite physical training in the academy (see discussion below of post-academy testing below).

## Health-Based Screening

Another alternative strategy is health-based screening, which tends to eliminate the negative effect on women applicants because appropriate norms are used. The purpose of health-based screening is to prevent on-the-job injuries rather than predict successful job performance. Because such fitness tests are not purported to simulate job tasks, the passing criteria are typically normed by gender and/or age. This approach is currently used by the U.S. Army, Navy, Air Force and Marines for their incumbents, and it represents the current position of the U.S. Department of Justice, according to their web site:

"The Department of Justice is on record as supporting the use of gender-based physical fitness standards for positions, such as police officer. There are a number of cases which have adopted this position. See SEPTA and Powell. In *Peanick v. Reno* (8th Cir.), a case involving the selection of U.S. Marshals, the Department of Justice set forth its position on this subject. See section I.A. of the brief."<sup>14</sup>

Such gender norming of health-based standards has been upheld repeatedly by the courts, both for entry-level selection and testing of police incumbents.<sup>15</sup> It is important to note that all but one of these cases were decided after the Civil Rights Act of 1991, which prohibits the use of altered or adjusted cutoff scores on selection tests. The courts have upheld the use

<sup>12</sup> Pynes, J. & Bernardin, H.J. (1992). Entry-level police selection: The assessment center is an alternative. *Journal of Criminal Justice*, 20, 41-52.

<sup>13</sup> Ash, P., Slora, K.B. & Britton, C.F. (1990). Police agency officer selection practices. *Journal of Police Science and Administration*, 17 (4), 258-269.

Gaines, L.K., Falkenberg, S. & Gambino, J.A. (1993). Police physical agility testing: An historical and legal analysis. *American Journal of Police*, 12 (4), 47-66.

International City Managers Association (1990). Baseline data report, *ICMA*, 23 (5), 6.

Townsey, R.D. (1992). Female patrol officers: A review of the physical capacity issue. In B.R. Price & N.J. Sokoloff (Eds.). *The Criminal Justice System and Women: Women Offenders, Victims and Workers* (Chapter 23, p. 413-425). Clark Boardman: NY.

<sup>14</sup> U.S. Department of Justice web site, <http://www.usdoj.gov/crt/emp/faq.html#pea> (visited 2/3/2003).

<sup>15</sup> *Alspaugh v. Michigan Law Enforcement Officers Training Council*, 246 Mich. App. 547(2001); *Franz v. City of O'Fallon, MO*, U.S. District Court of St. Louis (1995); *In Re: Grievance of Scott*, 779 A.2d 655 (Vt. 2001); *Lanning v. Southeastern Pennsylvania Transportation Authority*, 181 F.3d 478 (3<sup>rd</sup> Cir. 1999); *Peanick v. U.S. Marshals Service*, U.S. District Court of St. Louis (1994); *Powell v. Reno*, C.A. 96-2743 (NHJ, slip op. at 6 (D.D.C. July 24, 1997); *United States v. City of Wichita Falls*, 704 F. Supp. 709 (N.D. Tex., 1988).



of normed standards, for a number of reasons: (1) because the tests are designed to assess general fitness rather than minimum standards for job performance, (2) because the normed standards are used to expand the competitive pool of qualified applicants but not to exclude anyone at hiring, (3) and because normed standards that appear different actually represent identical levels of underlying physical fitness.

### **Job Simulation Tests**

If an agency seeks to implement a physical agility test that simulates actual job activity, it is important to document that the components and cutoff scores used represent standards for physical performance that are truly essential to the job of policing. Cutoff scores must not be determined arbitrarily, and they must not exclude incumbent officers who are performing the job satisfactorily. Any increase in standards must be justified with evidence of problems that resulted from the prior practice.

Increased scrutiny of the courts means that developing and validating a legally defensible job simulation test may be an uphill battle. Validation studies must therefore follow rigorous scientific and professional standards. If any type of job simulation test is used, an employer should also consider setting cutoff scores at different levels for academy entrance and exit. This approach acknowledges the reality that physical training takes place in the academy and allows an employer to first screen applicants for the requirements of academy training and then later test employees for successful job performance.

### **Post-Academy Testing**

Another option for police officer selection is to test the physical performance of recruits after they participate in a conditioning program as part of the training academy. Not only does this strategy mitigate the risk of discriminatory impact by allowing recruits to train for successful performance, but it may also afford better assessment of job-related tasks such as defense tactics. For example, recruits could actually be evaluated on their physical apprehension of a resistant person after they have received training in general physical agility and unarmed defense tactics. Although some police administrators raise concern regarding the cost of such programs, there may be savings in terms of injuries, disability, reduced turnover and absenteeism, and perhaps even potential litigation. Moreover, the expenditure reflects the value that agencies place on increased health and diversity in the workforce. Post-academy testing is perhaps best combined with entry-level health screening, to insure that police recruits are physically capable of completing the academy training and to individualize the conditioning program.

An additional advantage of post-academy testing is that it can potentially provide an opportunity for recruits to re-test after failing an initial attempt and participating in remedial training. Indeed, fitness training programs have been shown to have success in improving the health, well-being, and job performance of law enforcement personnel.

## **CONCLUSION**

In an era when communities increasingly demand excellence, responsiveness, and diversity from their police service, the need to recruit and consider the best applicants has never been more urgent. Because the research unequivocally demonstrates that women can perform the job of policing as successfully as men -- and in fact that women bring certain advantages to the field of law enforcement -- it is critical to eliminate the adverse impact of entry-level physical testing so it includes all successful candidates without excluding qualified women.

Unfortunately, the present research highlights many of the obstacles to improving entry-level physical agility testing. There is currently no consensus regarding the physical requirements of policing, which makes it difficult to accept any police agency's claim that a particular test or component actually represents business necessity. In addition, the corresponding technical report details a number of theoretical and methodological problems hamper efforts to document the physical activities that are essential for policing (content validation) and to predict successful job performance (criterion-related validity). Many of these problems arise from the powerful assumption that policing requires a great deal of physical prowess, a stereotype that limits the potential contribution of job analysis studies to define the actual requirements of the job.

Fortunately, there are a number of alternative strategies available to police administrators -- options that can assist in both selecting successful candidates and reducing the discriminatory impact on women. Physical agility testing can be eliminated, as many agencies have done without any apparent negative consequences, or replaced with health-based screening to assess general physical fitness. Alternatively, testing can be postponed until after the training academy, so recruits can prepare with a regimen of physical conditioning and performance standards can better reflect actual job tasks. Any of these alternative strategies is likely to reduce or eliminate the discriminatory impact on women so police agencies can more effectively recruit and retain valuable female personnel. Ultimately, any improvement in the selection of police officers will yield benefits not only to their employing agency but also to the communities they serve.