$w(y,z) = (1-cy)\,[1-a(1-y)f(z)]$ ← not killed

↑ killed

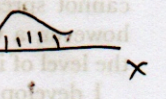
↑ cost to who survived

$w(y) = (1-cy)$ [who is not killed]

$[1-a(1-y)f(y)]$ ~~E[n]~~ [1 − P(x > defense dissipation)

↑ ~~P(x=0)~~

$1-P(0)$



In this model, the individual without the defense ~~was~~ is killed immediately, with $[1-P(x=1)]$.

* follows poisson distribution.

~~$w(y) = (1-cy)\,[1-\tfrac{1}{2}P(x\geq 0)$~~

$w(y) = (1-cy)\,[1-P(x>0)(1-y)f(y)]\,P(x<d)$

$\frac{dx}{dy}$

$\frac{dw}{dx} = \frac{\partial w}{\partial y}\frac{dy}{dx} + \frac{\partial w}{\partial z}\frac{dz}{dx}$

$\frac{dw}{dy} = \frac{\partial w}{\partial y} + \frac{dz}{dy}\cdot\frac{\partial w}{\partial z}$

$w(y, z, N)$