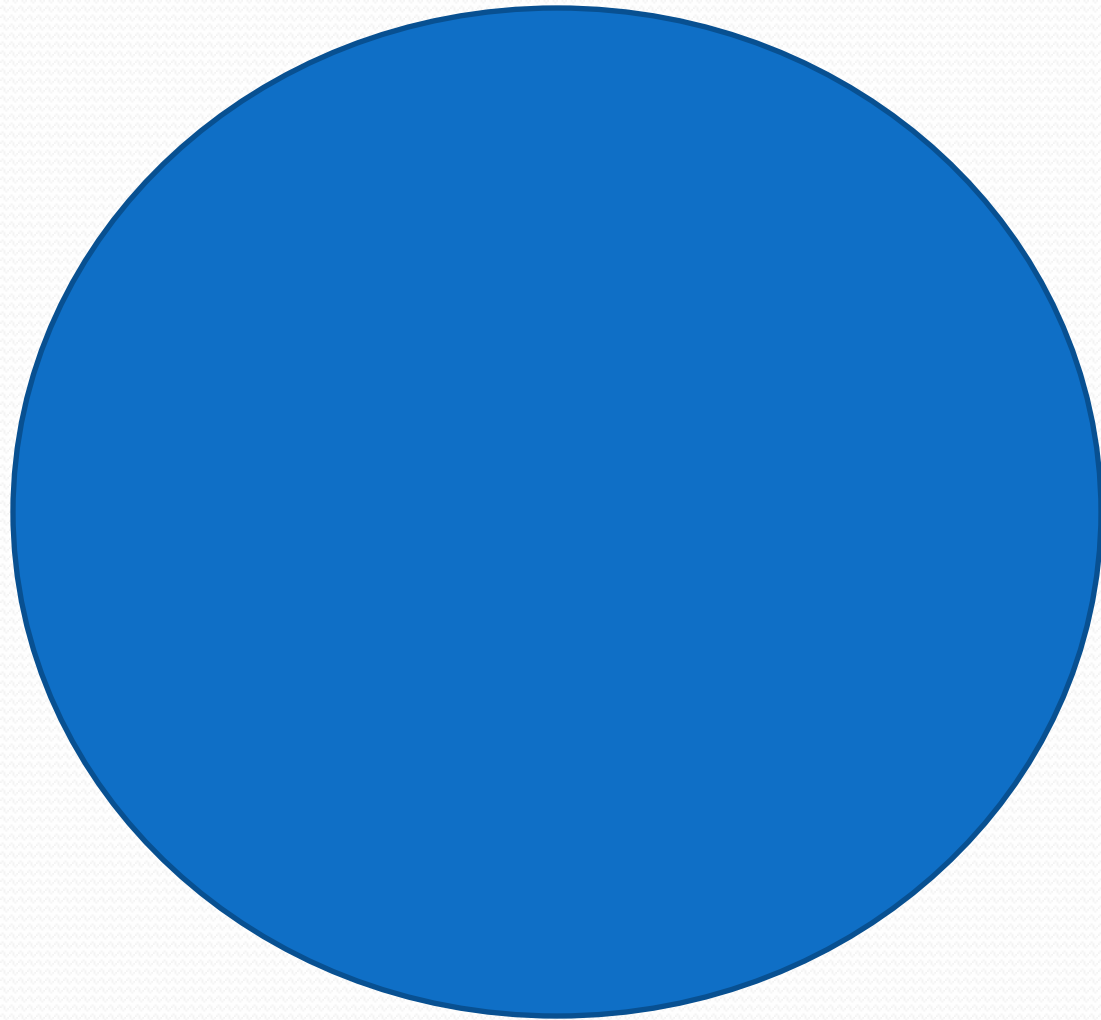


**Understanding
“The Basics”
Of
Systems Thinking**

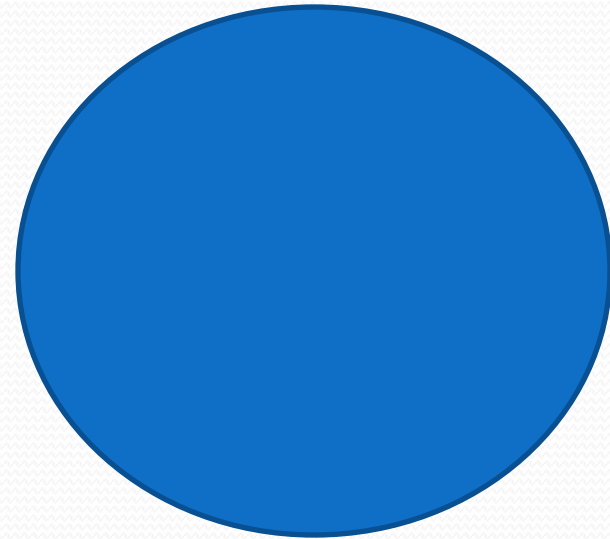


What Do You See?



What Do You See Now?


What Do You See Now?



What if I told you that you were seeing the same thing every time, what would you say?

Would your answer be; “it is not possible that everything that you just viewed is identical, that you could, in fact “name” the differences to prove to me that you did not view the same thing three times?”

If that is your response, you may count yourself in the majority of people who have participated in this very exercise. You may also count yourself as a “linear” thinker. This is because you were basing your response(s) on the elements of what you were viewing and not the larger system (or “big picture”).



The three items that you viewed, were slides from a PowerPoint presentation and nothing more. The content of each slide is irrelevant to the PP presentation itself.

...And so begins your awareness of Systems Thinking...

What is Linear Thinking?

- Linear means lines, or along a line, or one dimensional, a starting point and an ending point.
- The shortest distance between two points is a straight line.

A _____ B

- Linear thinking leaves no room for unseen variables and is center in a “cause and effect” explanation of events.

Cause & Effect: (linear)

Problem:

- I push you
- You fall down

Solution:

- I stop pushing you
- You stop falling down

SYSTEM:

A group of interacting, interrelated, or interdependent elements forming a complex whole.

Ex:

Human body has many elements (cells, blood, bone organs etc...) that interact either dependently or interdependently to form a complex whole.






System thinking looks at the bigger picture and can actually solve problems before they become problems.

There is no magic wand or fortune telling involved in this process, just a different way of viewing situations, events or problems from the systemic level.

This allows for much more than just simple cause and effect results.



**The reason why you very rarely
hear about systems theory or
systems thinkers;
is because nobody ever gets
credit for solving a problem
before it exists...**

Here is an example of how that works:

- A man rushes into a burning building and rescues a baby from a blaze that has already taken 25 lives. He is hailed a hero and credited for saving the child's life.

The problem (the fire)

The problem solver(the hero)

The credit (for the rescue)

- What if a systems thinker invented a fire extinguishing system for that building and the fire was never allowed to rage out of control in the first place. No lives lost, no rescue needed.

No problem-----No credit

Example of how a problem can be viewed from both perspectives:

The problem:

John lives in an apartment with no central heating and must supply his own heat source. The space heater in John's apartment overheats and almost catches on fire. Luckily, John is home and unplugs the space heater before a fire can start. Although the fire has been averted, the concern now is; that it is winter time and it gets very cold in the apartment. John does not like the cold because it aggravates his arthritis.

Linear view and solution:

John does not like cold weather



It is winter



Heater suddenly breaks



Get old heater fixed

OR

Buy new heater



John is no longer cold



Problem solved....or is it???

System view and solution:

- The problem is not that the heater broke, that is just a symptom of the larger problem.
- The problem is that John's apartment has no heat and that John has an adverse physical reaction to the cold.
- Looking at the problem from that larger perspective will change the way we attempt to solve it.
- Instead of repairing the old heater or buying a new one, a systemic solution would be to move John to an apartment in an area with a warmer climate or at the very least, move him to an apartment that has central heating.

The Difference

In the linear model, fixing or buying a new heater may have taken care of the immediate problem of John being cold (thus removing the symptom), but the main issue still exists: John's apartment has no heat. The heater may in fact break again or worse, (because we know of previous hazards) set his apartment on fire.

In the systems thinking model, by having John move to a new warmer location, we remove the issue of John being cold all together. And in fact, most likely prevented a problem from happening (heater malfunctioning and starting a fire or John having more physical problems due to the cold).

Why this is important to addiction treatment:

Problem:

John's family brings him into a treatment center because he will not stop using drugs. He is 25 and has been like this for over 10 years. He is stealing money from the family and getting into trouble with law enforcement. John's family wants his behavior to change.

Linear solution cause & effect:

- The cause of John's behavior is the use of drugs.
- An intervention and interruption of the drug use will have an immediate and positive impact on behavior.
- Ongoing treatment & education & monitoring of John's condition will be needed to extinguish the behavior completely.

The family listens to this linear thinking and advise and puts John in a treatment facility forcing John off all drugs.



**...John commmits suicide
three days later...**

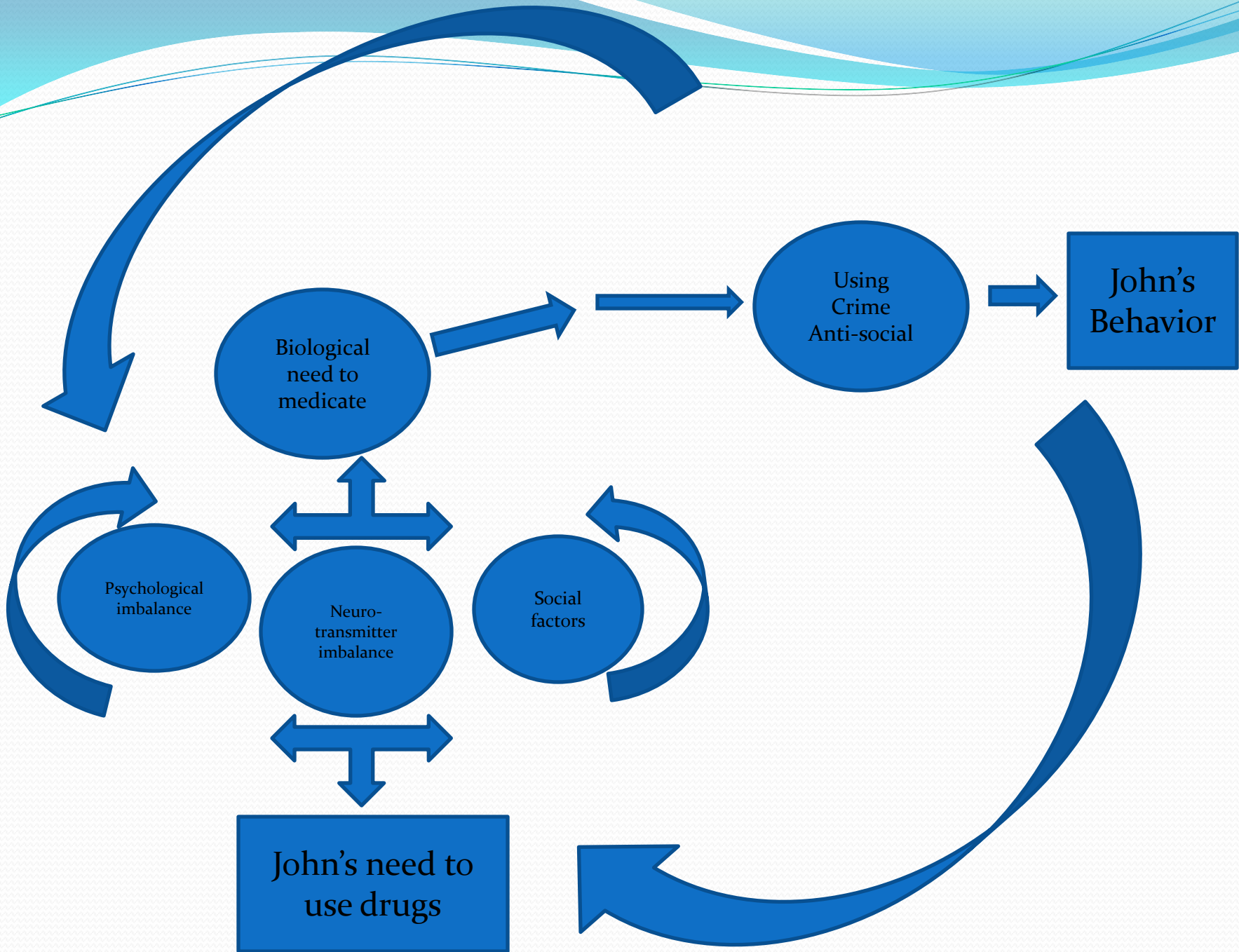
What went wrong????

The linear view looked at John's behavior as the problem and the primary situation that needed to be addressed. Unfortunately for John, his behavior was just a symptom of a much larger "Systemic" problem.

A System Thinker's view:

- John's behavior is not the problem, it is just a symptom of the larger problem.
- Investigate the other contributing factors that surround John.
- Identify the problem as what creates the need for John to use drugs in the first place.
- Looking systemically, we address the problem as a whole and not just the individual elements.

Here is what that model might look like....



Using The Systemic Model

- What we find by using the system thinking model is:
- John had a biological need to use drugs (self-medicate) because of a neurotransmitter imbalance in his brain that was never diagnosed.
- John had psychological problems as a result of this imbalance.
- John's social interactions (stealing, family drama) were a direct result of the imbalance and his attempts to correct it himself.

Results

- By using this approach we do not throw John in a treatment center to detoxify and correct his behavior.
- We find a balance of medication to correct the imbalance in John's brain.
- We reinforce this medication with some behavior modification therapy to help John integrate back into his family and society.
- Outcome:
- John does not commit suicide and is able to function at normalized levels because of the medication and CBT (cognitive behavioral therapy)



**Systems Thinking is a
must for people in the
Addiction Treatment
Profession**

**It is the difference between
life and death.**



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