



Promoting Information Security: From Thought to Action

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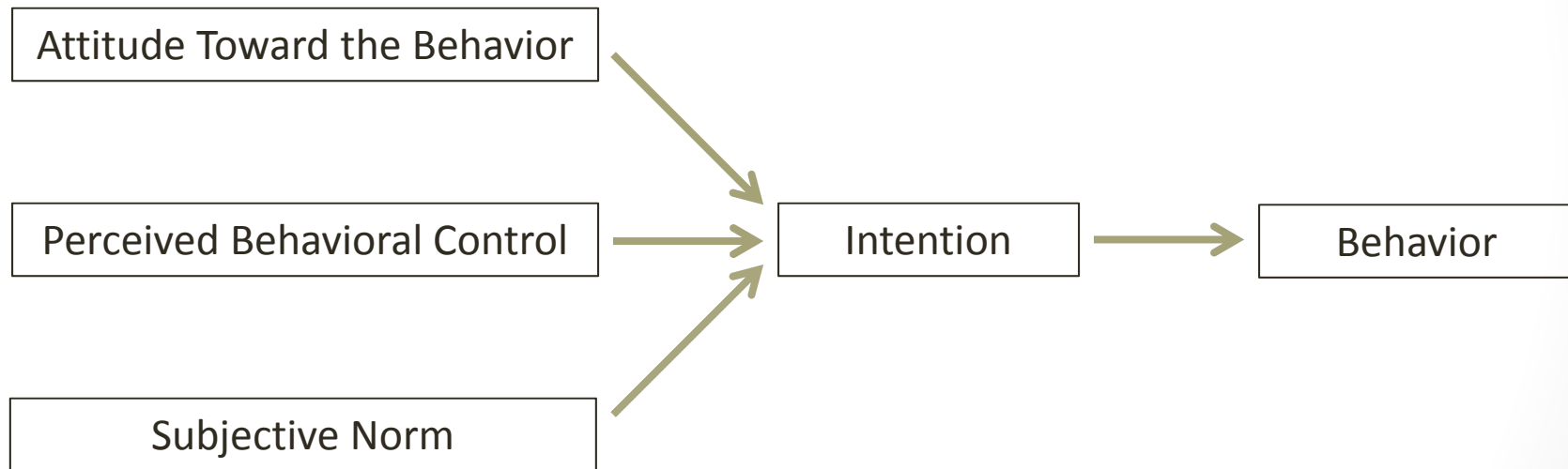
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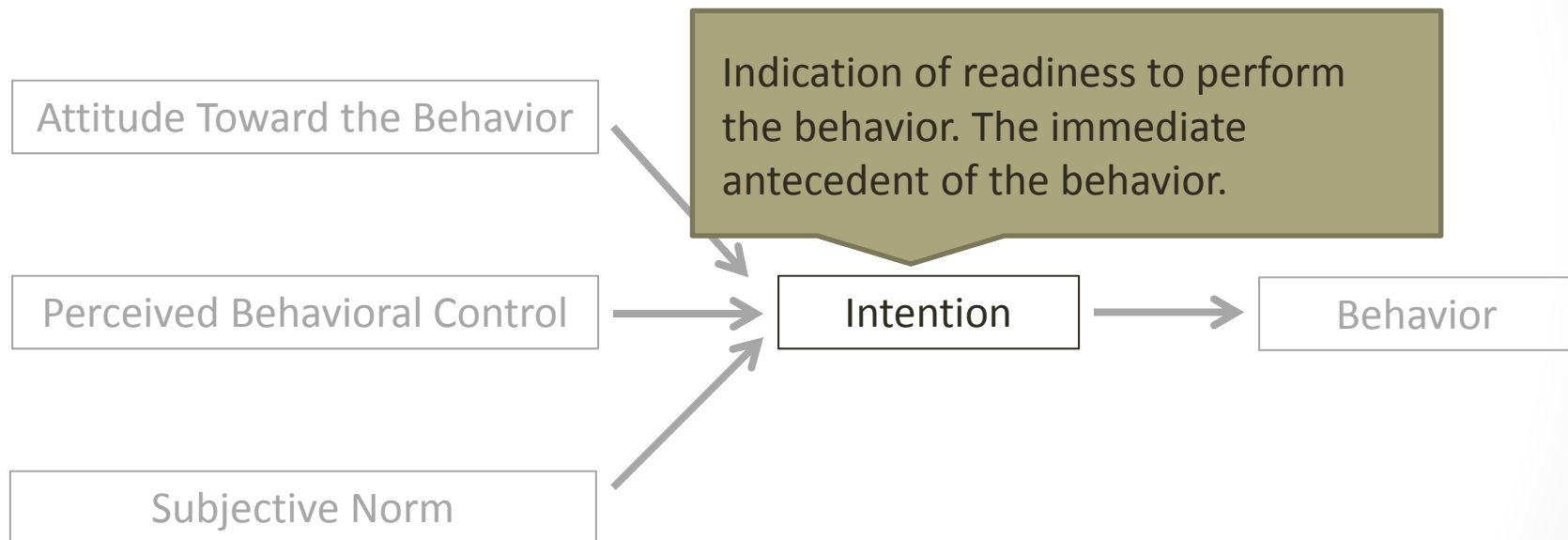
Theory of Planned Behavior

- “The relationship between human thought and action” (Armitage & Christian, 2004)
- Broad application to applied problems
 - Safety behavior (e.g., driving speed, seat belt use, condom use, health behavior, wearing safety gear, sun safety)
 - Information technology acceptance (e.g., e-commerce, 3G mobile services, instant messaging, podcasting, web-based learning, internet banking, social networking)
 - “Counterproductive use of [work] computers” (Morris, 2007)

Theory of Planned Behavior

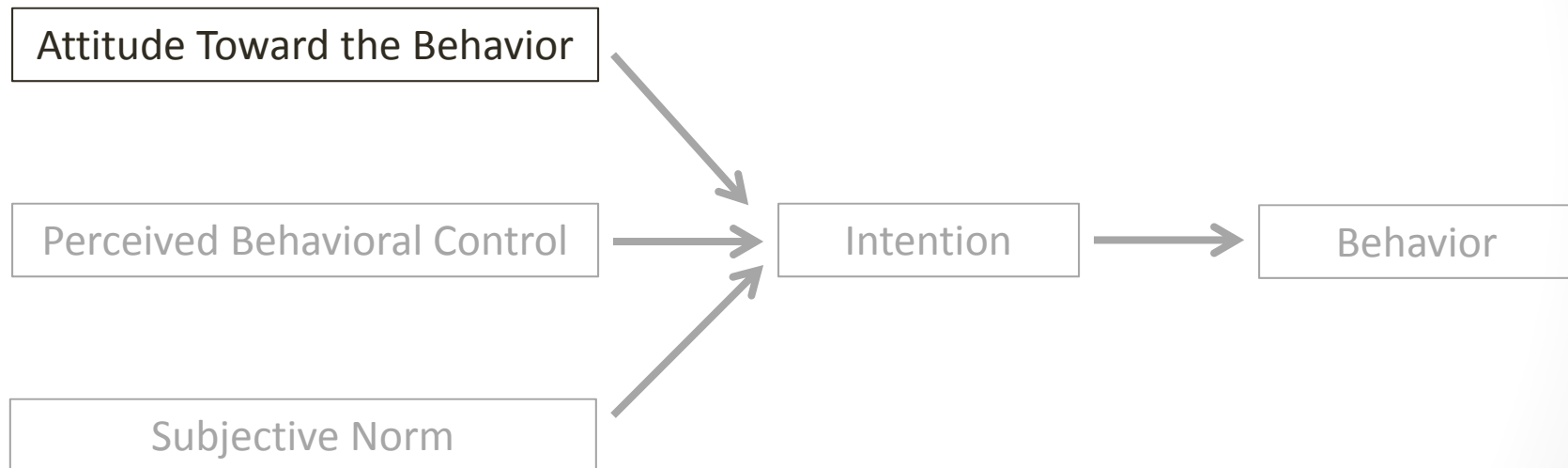


Theory of Planned Behavior

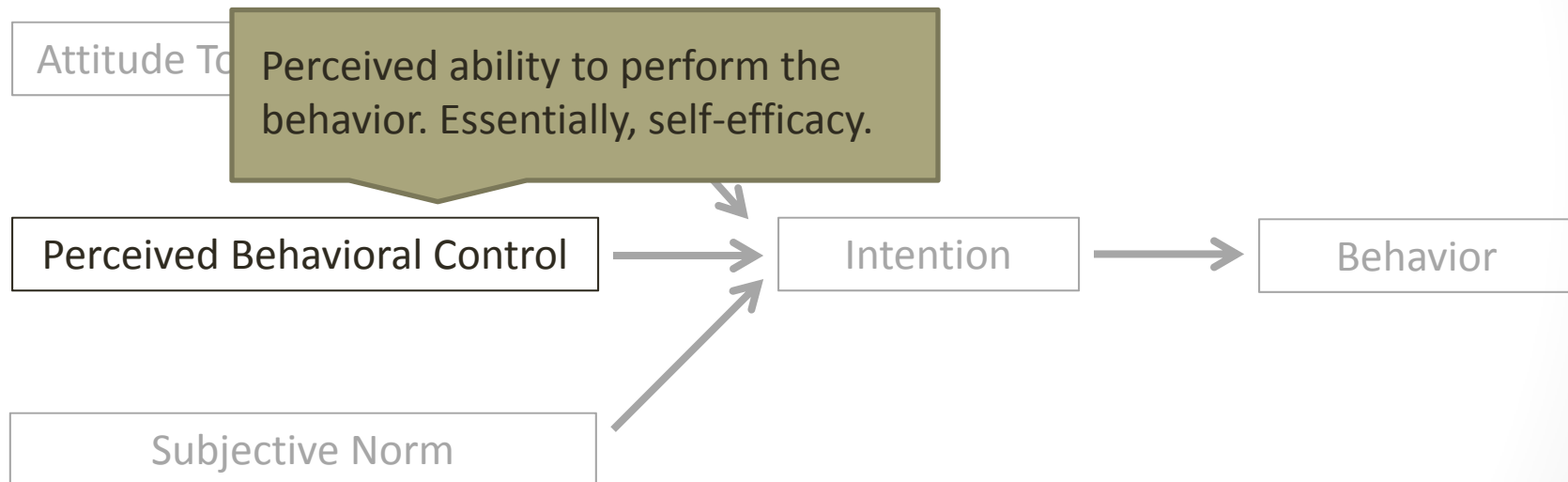


Theory of Planned Behavior

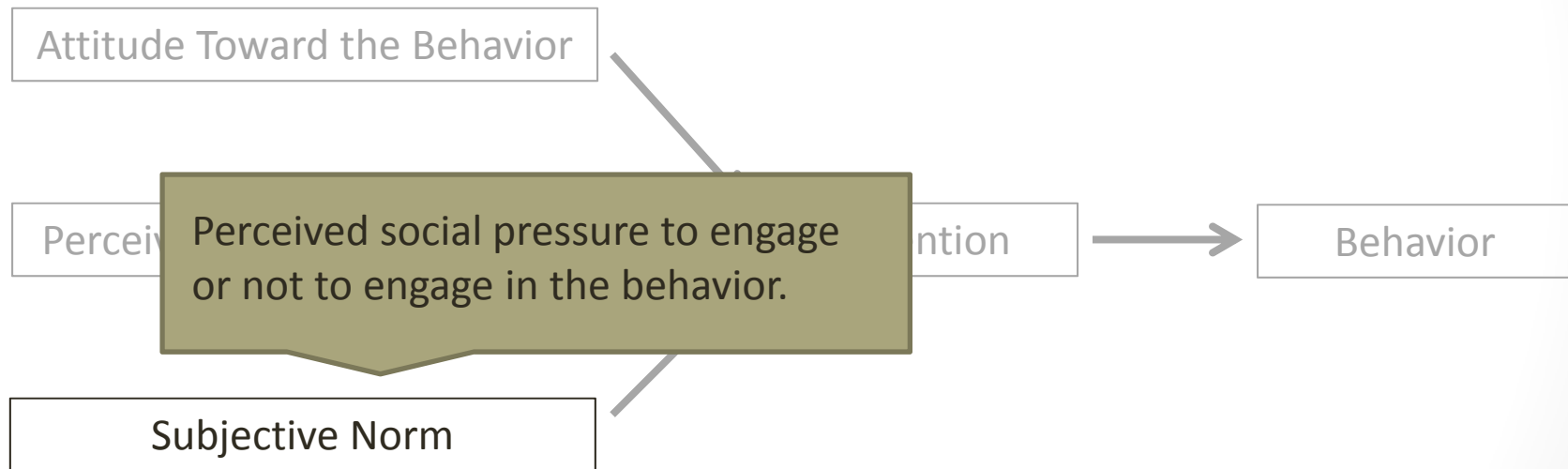
The degree to which the behavior is positively or negatively valued.



Theory of Planned Behavior



Theory of Planned Behavior



Organizational “Climate”



- Defined as:
 - “Policies, practices and procedures that are rewarded, supported and expected in an organization” (Dickson & Mitchelson, 2007, p. 545)
- Shared perceptions
- Relevant to a specific domain
 - Ethical climate
 - Service climate
 - Safety climate
 - Information Security climate (e.g., Chan et al., 2005; Herath & Rao, 2009)

Antecedents to Climate



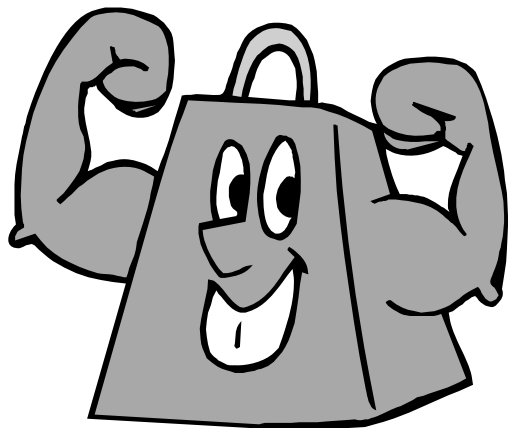
- “Strong” situations
- Leadership

Strong Situations

- What do people do at a...



Strong Situations

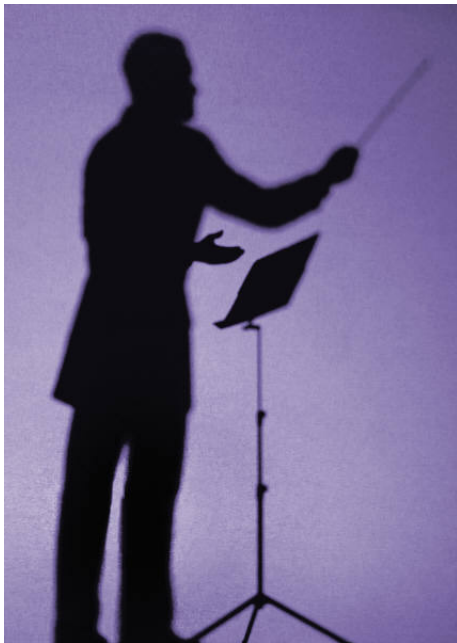


- Certain characteristics of situations lead everyone to behave similarly
- If everyone behaves similarly due to the situation, dispositions (e.g., personality) will not drive behavior
- We do not want to have to rely solely on employee dispositions to drive their behavior!
 - **Insider Threat** (Greitzer et al., 2010; Pfleeger & Stolfo, 2009)

Strong Situations

- How do we create a Strong Situation?
- Information should be
 - Clear
 - Consistent
- Consequences vis-à-vis decisions and actions
 - Rewards work better than Punishments

Leadership



- Longstanding proposition that leaders create climate (Zohar, 2010)
- Empirical evidence—3 examples:
 - Safety climate (Fogarty & Shaw, 2010; Zohar, 1980)
 - Employees' perceptions of management attitudes about safety
 - Climate for service (Schneider et al., 2002)
 - Branch manager's behavior that supports and rewards the delivery of service
 - Information Security climate (Chan et al., 2005)
 - Customary information-security related actions of upper management as observed by the individual employee

Leadership

- So, how do leaders create climates?
 - ...or improve existing climates?
- A few strategies
 - Transformational Leadership (Sosik, 2007)
 - Articulating a vision and a plan to achieve it
 - Personally modeling high standards of conduct
 - Signaling (Zohar, 1980)
 - Status of cybersecurity committee and members

Thank You!

