

Distracted Driving: Changing Culture through Positive Community Norms

Jeff Linkenbach, Ed.D. and Jason Kilmer, Ph.D.

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- We are recording this on March 12, 2021
- But it's for your use on April 26, 2021
- And we are re-watching it with you on that same day, which hasn't happened yet...
- Which can only mean one thing...

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WE'RE GOING BACK TO THE FUTURE



3

Truthfully, Jeff predicted this on page 3 of the Report on Social Norms in 2004



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Where Jason appeared right after him on page 4



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- The respected Back to the Future researcher, Dr. Emmett Brown, when explaining the importance of not altering the past in case it affects the future said:

• "Anything you do can have serious repercussions on future events...do you understand?"

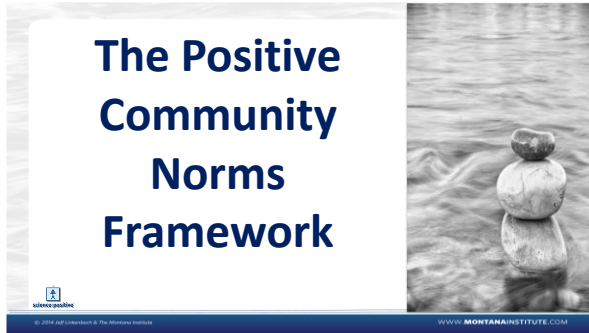
- We DO understand

- So, to guarantee nothing changes in the future if we reorganize how we've done this in the past, Jeff is going first, then Jason

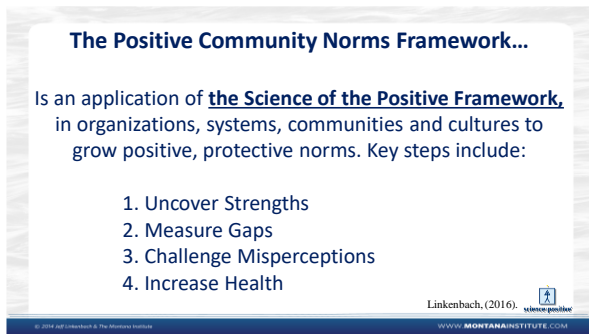
- That's just good science



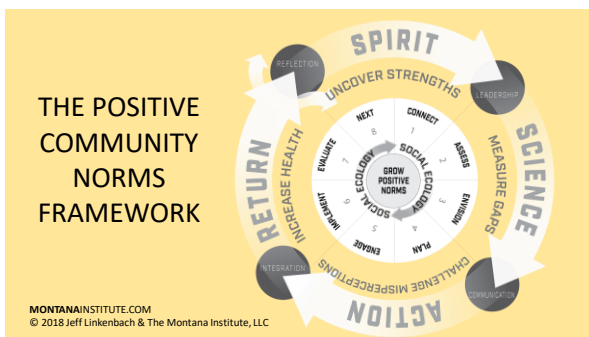
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What is the Science of the Positive?

The Science of the Positive is the study of how positive factors impact culture and experience.

The focus is on how to measure and grow the positive, and is based upon the core assumption that the positive is real and is worth growing – in ourselves, our families, our workplaces and our communities.

Linkenbach, (2016). *Applying the Science of the Positive to health and safety.*



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Core Assumption of The Science of the Positive:



The POSITIVE
Exists, it is real, and is
worth growing

Linkenbach, J. (2007). *The Seven Core Principles of the Science of the Positive Workbook*. A Publication of The Montana Institute, LLC.

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**The solutions are
in community**



Linkenbach, J. (2007, 2018). *The Science of the Positive: The Seven Core Principles Workbook*. A Publication of The Montana Institute, LLC.

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Using fear appeals can make the problem worse



United Press International (2007). Ads focused on 'drinking stories' may backfire. United Press International, December 11, 2007.

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“If we want
HEALTH,
we must
promote
HEALTH.”

- Linkenbach, 2000

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Guiding Questions

- Spirit**
What will be the spirit of our work?
- Science**
How will we approach the science?
- Action**
What will be our actions?
- Return**
What returns will we seek?

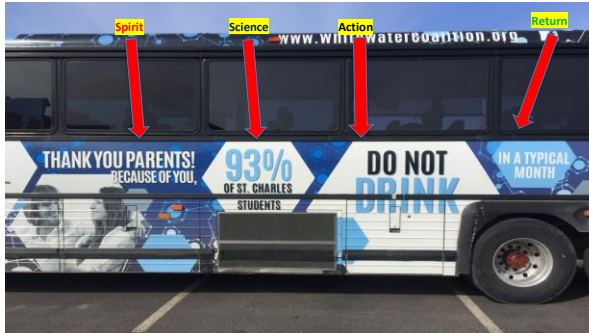


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What's a norm?

- *51% or more*
- *Majority*
- *Most*
- *Almost All*

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Social Norms Theories say...
we tend to do (or believe) what we think
MOST people do (or believe).

(the perceived norm)
 and often what we think
most other people do is wrong!

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There were even misperceived norms about drinking in Back to the Future



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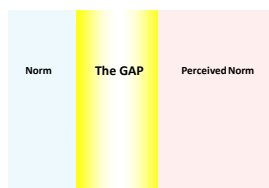
- **Marty McFly:** Yeah, well, you shouldn't drink.
- **Lorraine Baines:** Why not?
- **Marty McFly:** Because you... You might regret it later in life.
- **Lorraine Baines:** Marty, don't be such a square. *Everybody who's anybody drinks*



Normative misperception!

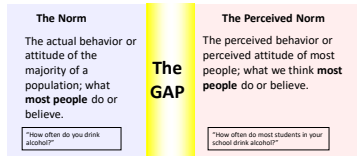
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Norms Theories



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Norms Theories



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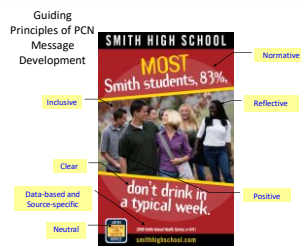
There were guidelines about PCN message development (especially posters) in Back to the Future



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- Marty McFly:** Wait a minute. Wait a minute, Doc. Ah... Are you telling me that you built a time machine... out of a DeLorean?
- Dr. Emmett Brown:** The way I see it, if you're gonna build a time machine into a car, why not do it with some **style?**

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Positive Community Norms Logic Model



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** Seamless and perfectly
choreographed transition between
Jeff and Jason happens here **

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"Great Scott!"



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Great Musical Scott:

Scott Joplin
"The Entertainer"
"Maple Leaf Rag"

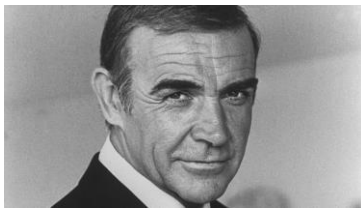
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Most sought after great Scott of 2020



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Great Scot



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Child and Adolescent Social Work Journal
https://doi.org/10.1007/s10560-020-00944-4

Reduction of Youth Monthly Alcohol Use Using the Positive Community Norms Approach

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Doreen T. Laddner⁵ · Jordan S. Osner⁶ · Valérie S. Rucker⁷ · Sara J. Thompson⁸

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Abstract

This research evaluated the impact of the Positive Community Norms (PCN) approach on (a) correcting misperceptions of rates of peer alcohol use and (b) reducing prevalence of monthly alcohol use among a sample of high school students. A 9-year intervention consisting of a suite of strategies centered around presenting actual norms related to alcohol use was implemented by community coalitions in 11 school districts selected by the Minnesota Department of Human Services. Youth intervention of some substance abuse norms were embedded in each community, as well as norms of parents and adults in the community. In the absence of control communities, national data from Monitoring the Future (MTF) (Muth et al. in Monitoring the future national survey results on drug use, 1975–2017: secondary school students, vol. 1 (Springer))

“...in communities where the PCN approach was implemented, significant reductions in youth alcohol use were measured (p. 9 of 11)”

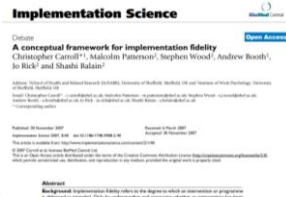
Linkenbach, et al., (2021)

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Implementation Fidelity is “the degree to which... programs are implemented...as intended by the program developers” (Dusenbury, et al., 2003; Carroll, et al., 2007)



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Implementation Fidelity is “the degree to which... programs are implemented...as intended by the program developers” (Dusenbury, et al., 2003; Carroll, et al., 2007)

Given this definition, why are we in luck when it comes to implementation of Science of the Positive and Positive Community Norms (PCN)?

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Given this definition, why are we in luck when it comes to implementation of Science of the Positive and Positive Community Norms (PCN)?

WE HAVE THE PROGRAM DEVELOPER RIGHT HERE!!!!

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Elements in Implementation Fidelity (Carroll, et al., 2007, page 4 of 9)

Adherence

- Content
- Coverage
- Frequency
- Duration

A conceptual framework: elements and relationships

Adherence

Adherence is essentially the bottom-line measurement of implementation fidelity. If an implemented intervention adheres completely to the content, frequency, duration, and coverage prescribed by its designers, then fidelity can be said to be high. Measuring implementation fidelity means evaluating whether the result of the implementation process is an effective realisation of the intervention as planned by its designers.

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Elements in Implementation Fidelity (Carroll, et al., 2007, page 4 of 9)

Adherence

- **Content**
- Coverage
- Frequency
- Duration

← *The “active ingredient” of the intervention*

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What does this mean?

- Do you have what you need for your “active ingredient” of a PCN message?

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Elements in Implementation Fidelity
(Carroll, et al., 2007, page 5 of 9)

Adherence

- Content
 - Coverage
 - Frequency
 - Duration
- ← The "dose"

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What does this mean?

- Identify a plan for dosing

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What does this mean?

- Go all in...if you're going to do PCN, do it right...stay true to the original intent

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There were so many messages about speed and highway safety in *Back to the Future*



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- Marty McFly:** Hey, Doc, we better back up. We don't have enough road to get up to 88.
- Dr. Emmett Brown:** Roads? Where we're going, we don't need roads.

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Carter, et al., (2014)



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Carter, et al., (2014)

- Utilized 403 dyads with parents-teens (16-18 years of age)
- 91.8% of adolescents regularly engaged in distracted driving behavior
- **Adolescents perceived their parents and their peers engaged in distracted driving behavior more frequently than themselves**

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Carter, et al., (2014)

- In a multivariate model explaining over 40% of the variance in teen distracted driving, significant predictors were:
 - Adolescent risk perception
 - Parent distracted driving behavior
 - **Perceived parent distracted driving behavior**
 - **Perceived peer distracted driving behavior**
 - Parent and peer approval were not predictive

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Terry & Terry (2016)

Car Psychology 2016, 10:105-120
DOI: 10.1080/17445019.2016.1157152



Distracted Driving Among College Students: Perceived Risk Versus Reality

Christopher R. Terry^{a,*}, Danielle L. Terry^b

Published online: 27 August 2016
© Springer Science+Business Media New York 2016

Abstract Although the rate of alcohol-impaired driving among adolescents has declined in the past few decades, distracted driving has become a major public safety concern. The present study compared perceptions of accident risk and actual

crashes (1.2 million car accidents involved cell phone conversations and an additional 4% involved driving while driving) (250,000 accidents, NHTSA, 2013). Furthermore, drivers younger than 20 years of age currently represent the age group with the

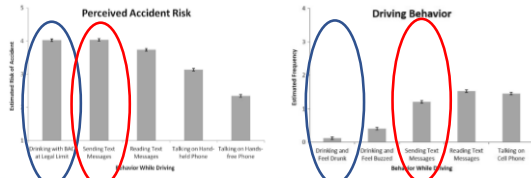
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Terry & Terry (2016)

- 726 college students
- Although saw sending text messages as just as risky as driving under the influence, were far more likely to actually send texts, read texts, and talk



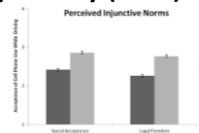
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Terry & Terry (2016)

- Gap in perceived norms and what they actually believed



"Ultimately, effectively reducing distracted driving behavior related to cell phone use may require changing the public perception of such behaviors by enforcing distracted driving laws and developing social marketing campaigns that carefully incorporate information about social norms and do not focus exclusively on risk awareness. (p. 119)"

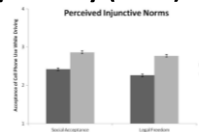
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Merrikhpour & Donmez (2017)



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Merrikhpour & Donmez (2017)

1. Introduction

Distraction is a significant contributing factor in teenage-driver crashes (Vergara, 2003; Shupe and Houghen, 2008; Williams, 2003). About 20% of all crashes involving 15–18-year-old drivers can be attributed to distracted driving (Curry et al., 2011). Further, in 2014, distraction contributed to 10% of 15–19-year-old drivers' fatal crashes in the U.S. (National Highway Traffic Safety Administration, 2016). While distractions have always been present in the driving environment, rapid advancement in mobile and in-vehicle technologies has made the issue ever more pronounced. It is estimated that over 90% of teenage and young drivers send text messages, and about 20% of them read emails and surf the internet while driving (AAMI, 2012; Archley et al., 2011).

In recent years, there has been a growing interest in using

motivational techniques to change individuals' behaviors. One of the most notable techniques is the social norms approach. Social norms are "rules and standards that are understood by members of a group, and that guide and/or constrain human behavior without the force of laws" (Cialdini & Trost, 1998, p. 152). Over the past two decades, normative information has been used to target behavioral changes in various domains, such as energy consumption (e.g., Kilian, 2012), alcohol use (e.g., Haines et al., 2003), smoking (e.g., Linkenbach & Perkins, 2003), and drunk driving (e.g., Perkins et al., 2000). Individuals usually overestimate the extent to which other members of their social groups engage in or approve of unhealthy behaviors (e.g., Berkowitz, 2004; Larimer and Neighbors, 2005; Sherman et al., 1983). Individuals also tend to use their perceived norms as a point of comparison for their own behavior and a reference point from which they do not want to deviate (e.g., Buss et al., 1991; Clapp and McDonnell, 2000). Thus, interven-

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Merrikhpour & Donmez (2017)

- Utilized 40 parent-teen dyads
- 17 to 19 years of age
- Considered real-time feedback following a driving simulator or post-driving feedback
- 5 drives on the simulator

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Merrikhpour & Donmez (2017)

- 6.5 minute drive on a 2-lane rural road
- 5 oncoming cars
- Instructed to follow a lead vehicle and maintain a speed of 50 mph
- 8 times, the lead vehicle braked
- Microsoft Surface distracted them in the simulator
- Participants had to scroll through 10 phrases and find a phrase that matched "Discover Project Missions"



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Merrikhpour & Donmez (2017)

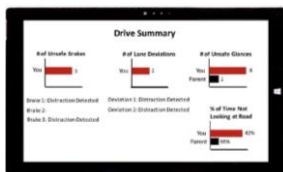
- Four conditions
 - Social norms (Post-drive feedback incorporating descriptive normative information...assignment to this condition was not random)
 - Post-drive feedback without normative information
 - Real-time feedback (alarm if glance exceeded 2 seconds)
 - No feedback

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Merrikhpour & Donmez (2017)



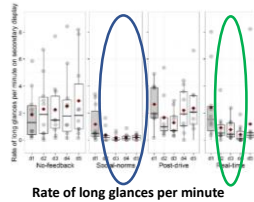
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Merrikhpour & Donmez (2017)

Social norms and real time feedback impacted behavior, "with social norms feedback outperforming real-time feedback as implemented in this study (192)"



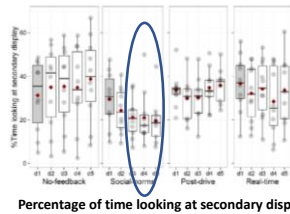
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Merrikhpour & Donmez (2017)

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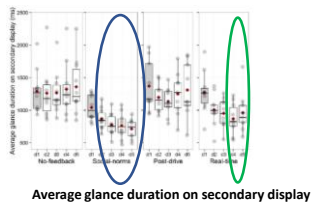
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Merrikhpour & Donmez (2017)

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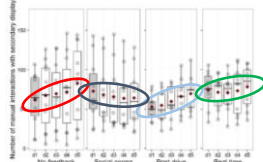
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Merrikhpour & Donmez (2017)

Social norms and real time feedback impacted behavior, "with social norms feedback outperforming real-time feedback as implemented in this study (192)"



Number of manual interactions with secondary display

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At the end of the day, in Back to the Future, there was a message of hope



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Marty McFly: If you put your mind to it, you can accomplish anything.



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Conclusions from research on distracted driving?

- Like other behaviors, there can be misperceived norms
- These can include misperceptions in approval of distracted driving, and rates of distracted driving
- If you can collect data on these behaviors, and identify gaps, you can put a spotlight on what “most” are doing
- PCN works!
- This works best as a part of an overall strategic plan that includes enforcement
- Keep in mind the spirit of the work – this is not about “getting people in trouble,” it’s about saving lives.

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So who was the real star of Back to the Future?



- “...it might just save your life...
- That’s the power of love”

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Thank you!

- Jeff Linkenbach
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 - <https://www.montanainstitute.com/>
- Jason Kilmer
 - jkilmer@uw.edu
 - @cshrb_uw
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