Distracted Driving:
Changing Culture through
Positive Community Norms

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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...

WE’RE GOING BACK TO THE FUTURE
Truthfully, Jeff predicted this on page 3 of the Report on Social Norms in 2004.

Where Jason appeared right after him on page 4.

• 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
The Positive Community Norms Framework

Is an application of the Science of the Positive Framework, in organizations, systems, communities and cultures to grow positive, protective norms. Key steps include:

1. Uncover Strengths
2. Measure Gaps
3. Challenge Misperceptions
4. Increase Health

Linkenbach, (2016).
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.


Core Assumption of The Science of the Positive:

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

The solutions are in community
Using fear appeals can make the problem worse

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

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?
What's a norm?

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

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

- **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*
The Norm
The actual behavior or attitude of the majority of a population; what most people do or believe.

The Perceived Norm
The perceived behavior or perceived attitude of most people; what we think most people do or believe.

Norms Theories

There were guidelines about PCN message development (especially posters) in Back to the Future
**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?*
* Seamless and perfectly choreographed transition between Jeff and Jason happens here *

“Great Scott!”

Great Musical Scott:

Scott Joplin
“The Entertainer”
“Maple Leaf Rag”
Most sought after great Scott of 2020

Great Scot

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

Linkenbach, et al., (2021)
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)?

WE HAVE THE PROGRAM DEVELOPER RIGHT HERE!!!!!
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. Assessing implementation fidelity means evaluating whether the result of the implementation process is an effective realization of the intervention as planned by its designers.

The “active ingredient” of the intervention

What does this mean?  
• Do you have what you need for your “active ingredient” of a PCN message?
Elements in Implementation Fidelity
(Carroll, et al., 2007, page 5 of 9)

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

The “dose”

What does this mean?
- Identify a plan for dosing

What does this mean?
- Go all in...if you’re going to do PCN, do it right...stay true to the original intent
There were so many messages about speed and highway safety in Back to the Future

• **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.
- 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

- 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

Terry & Terry (2016)
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

"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)"

Terry & Terry (2016)

- Gap in perceived norms and what they actually believed

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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

Merrikhpour & Donmez (2017)

1. Introduction

Distraction is a significant contributing factor in teenage-driven crashes. According to the Colorado State Patrol (2016), about 50% of all crashes involving 16-19-year-old drivers can be attributed to distracted driving. In 2015, 621 teens in Colorado died in motor vehicle crashes, with distraction being a contributing factor in 10% of these cases. The use of mobile devices while driving, such as texting and using social media, is a major concern among young drivers. In 2013, the National Highway Traffic Safety Administration reported that about 30% of drivers aged 16-20 years were distracted while driving.

In recent years, there has been a growing interest in using motivational techniques to change individuals' behaviors. One of the most effective techniques is the social norms approach. Social norms are "values and standards that are shared by members of a group, and that guide and control human behavior without the force of law." (Glanz et al., 1995). Studies show that peer influence plays a significant role in the behavior of young people, especially in risky behaviors such as drinking and drug use. For example, in a study by Gjorevski et al. (2013), high school students who perceived their peers as having a higher risk of drinking and using drugs were more likely to engage in these behaviors themselves.

Merrikhpour & Donmez (2017)

Merrikhpour & Donmez (2017)
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"

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
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)"

Rate of long glances per minute

Percentage of time looking at secondary display

Average glance duration on secondary display

Merrikhpour & Donmez (2017)

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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

![Marty McFly](https://via.placeholder.com/124)

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

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

• “…it might just save your life…
• That’s the power of love”

Thank you!

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