

# RECIDIVISM OF STUDENTS OF ONLINE DIVERSION OF MISDEMEANOR OFFENSES IN KENTUCKY CRIMINAL JUSTICE

A Study by AdventFS.com

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## SUMMARY OF FINDINGS

The following can be concluded from this study:

- When defined as re-arrest after diversion, the two-year recidivism rate for offenders diverted through an Advent online eLearning course was 25.7%, while the three-year rate was 31.6%.
- These rates are much lower than the re-incarceration rates of offenders jailed in KY during the same period for similar offenses.
- Most offenders who reoffend after an online substance abuse treatment will do so within three years of diversion.
- Offenders who reoffend after an online anger management or shoplifting course may do so up to five years after diversion.

A great deal of research into online learning seems to contradict this hesitancy to use online courses, demonstrating online learning to be as effective—often times more so—than conventional classroom settings:

- One of the earliest examinations of online learning effectiveness, Russell (1999), found that there were “no significant differences” in the effects of distance or online learning and teaching in a traditional format.
- The US Department of Education concluded that learning outcomes for students were at least as good as, and in some cases modestly better than, student performance in face-to-face settings (Means et al, 2010).
- A recent meta-analysis examining the effectiveness of one particular type of online courses suggests that outcomes in student learning are equivalent to those for face-to-face courses, and that opportunities for retrieval practice and learning, and mastery learning, may be particularly beneficial. (Glance et al., 2013).
- According to a 2015 study, “There are a large number of studies that find positive statistically significant effects for student learning outcomes in the online or hybrid format compared to the traditional face-to-face format. Some of the positive learning outcomes are improved learning as measured by test scores, student engagement with the class material, improved perception of learning and of the online format, stronger sense of community among students, and reduction in withdrawal or failure.” (Nguyen, p. 310).

To help further validate the use of online treatment in criminal justice, AdventFS.com (Advent), a leading provider of online “eLearning” courses that utilize CBT techniques, recently conducted an extensive review of data for misdemeanor criminal offenders who had taken select online CBT-based courses as part of prosecutor diversion programs in the Commonwealth of Kentucky.

This paper examines the findings of this review and compares outcomes of those online treatment programs, in relation to rearrests/recidivism, with other criminal justice strategies used in the Commonwealth at the time.

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## INTRODUCTION

Those working in the criminal justice system have come to recognize the importance of using evidence-based practices (EBP) to address criminal behavior and recidivism. Organizations from the National Institute of Corrections (NIC) to the Office of Juvenile Justice and Delinquency Prevention (OJJDP) maintain extensive databases of model programs and implementation guides that provide immediate information about the most cutting edge evidence-based best practices in the field today.

Some of the most prevalent of EBP strategies rely on principles of cognitive behavioral therapy (CBT). CBT is an approach used to help people change their behavior by changing their thinking. This involves becoming aware of one’s own thoughts and then working to change those thoughts, or to identify when those thoughts are faulty.

Despite the wide-spread success of EBP and CBT in criminal justice today, many courts, prosecutors and supervision offices across the U.S. have been hesitant to take advantage of the ubiquity of Internet and mobile Internet to offer online courses utilizing principles of CBT or other therapeutic approaches for treatment of offenders. Rather, many U.S. jurisdictions today continue to rely on physical classroom-only delivery of treatment, adding inconvenience and costs to taxpayers, offender families, and others.

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## STUDY METHODOLOGY

In creating this study, Advent randomly selected, from its systems, approximately 1,000 records of offenders who, as part of Kentucky prosecutors' misdemeanor diversion programs, had taken one of the following online CBT courses developed and hosted by Advent: Anger Management, Shoplifting, or Substance Abuse.

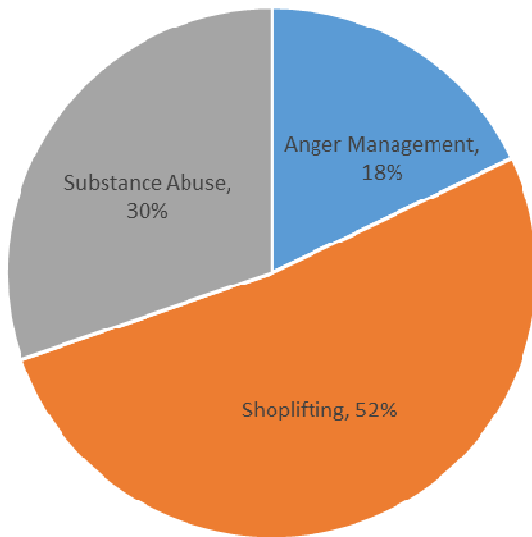
These records were then matched against public databases of arrest records to connect 703 of these offenders to their diverted offenses. Subsequent arrests for each offender were then captured to determine re-arrest rates, dates and offenses.

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## COURSES AND OFFENSES

Online CBT-based courses taken within the 5-year period of this study were Anger Management, Shoplifting, and Substance Abuse.

Over half of the participants in the study took Advent's Shoplifting course, while nearly a third took a Substance Abuse course. Anger Management, at 18%, reflected the least-represented course in the study.



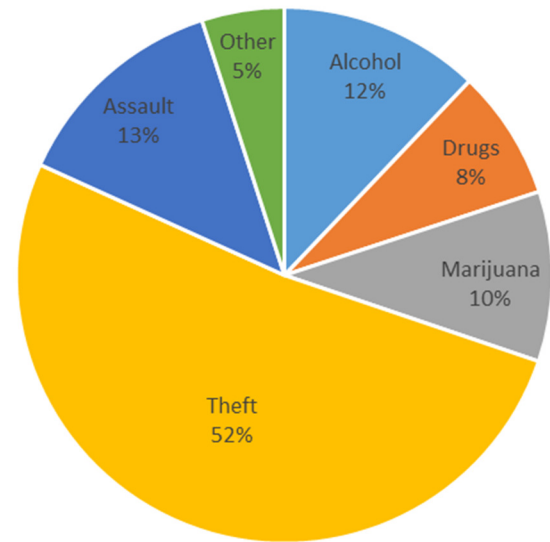
*Figure 1: Diversion Courses Studied*

The three online courses in the study reflected a variety of misdemeanor offenses for which a diversion was granted.

The Shoplifting course was most often assigned for petty theft cases. The Anger Management course was mostly assigned to low-level assault/no injury cases (13%) with a smaller number of these courses assigned for general public nuisance/aggression violations (5%).

Finally, Substance Abuse courses were assigned to those charged with minor alcohol violations (12%), marijuana possession charges (10%), and other minor

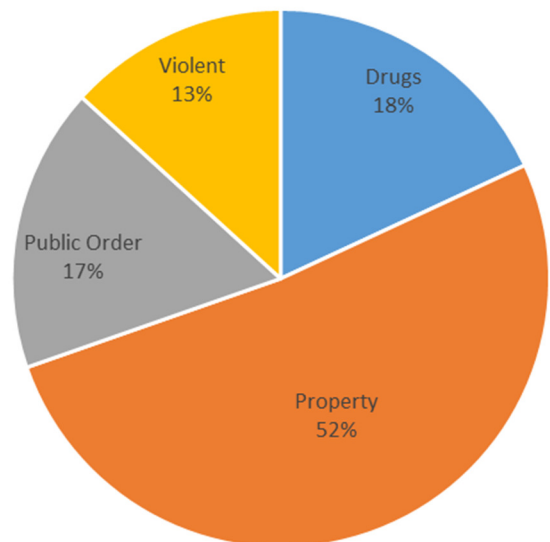
misdemeanor drug charges such as paraphernalia and improper prescription possession cases (8%).



*Figure 2: Offenses Diverted*

When these offenses are grouped by standard criminal justice reporting categories, over half can be reported as "property" offenses. Assaults fall into the "violent" category and constitute about 13% of the cases in this study. Marijuana and other misdemeanor drug offenses constituted another 18%.

All other charges, including minor alcohol violations, made up another 17% and can be classified under the general reporting category of "public order" violations.



*Figure 3: Offenses Categorized*

The below table (Table 1) breaks out each individual offense represented by a diversion course completed in the study data. Property offenses—shoplifting specifically—constituted over half of all diversions studied. Drug and Public Order offenses were roughly equally represented, while violent offenses were least represented in the study.

Diverted Offense	Representation
<b>Drugs</b>	18.1%
Marijuana	10.3%
Other Drugs	6.4%
Paraphernalia	1.4%
<b>Property</b>	51.6%
Shoplifting	50.6%
Other Theft	1.0%
<b>Public Order</b>	17.1%
Alcohol Offenses	12.1%
Other Offenses	5.0%
<b>Violent</b>	13.2%
Assault	13.2%

Table 1: Offenses Studied

## STUDY DEMOGRAPHICS

A little over half of those studied were male.

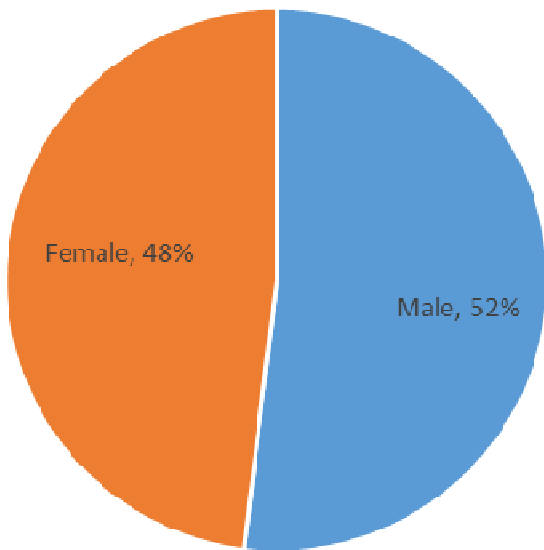


Figure 4: Diversion Students by Gender

Gender representation, however, was largely a function of offenses committed. Drug, Public Order, and Violent offenses were largely committed by males. However, property offenses like shoplifting were overwhelmingly committed by females.

Due to the overrepresentation of property offenses in the study (51.6% of diversion courses taken), the representation of females in the study was also high.

Diverted Offense	Male	Female
<b>Drugs</b>	70.1%	29.9%
Marijuana	80.6%	19.4%
Other Drugs	55.6%	44.4%
Paraphernalia	60.0%	40.0%
<b>Property</b>	32.2%	67.8%
Shoplifting	32.4%	67.6%
Other Theft	25.0%	75.0%
<b>Public Order</b>	73.3%	26.7%
Alcohol Offenses	77.9%	22.1%
Other Offenses	56.0%	44.0%
<b>Violent</b>	77.4%	22.6%
Assault	77.4%	22.6%

Table 2: Offense by Gender

Interestingly, while marijuana offense diversions were overwhelmingly male, other drug offenses such as improper prescription possession and paraphernalia had much higher female representation.

As shown in Figure 6 below, the median age at time of diversion for those in the study was 29.7 years. This is well below Kentucky's median age of 38.3 and the U.S. median age of 37.4.

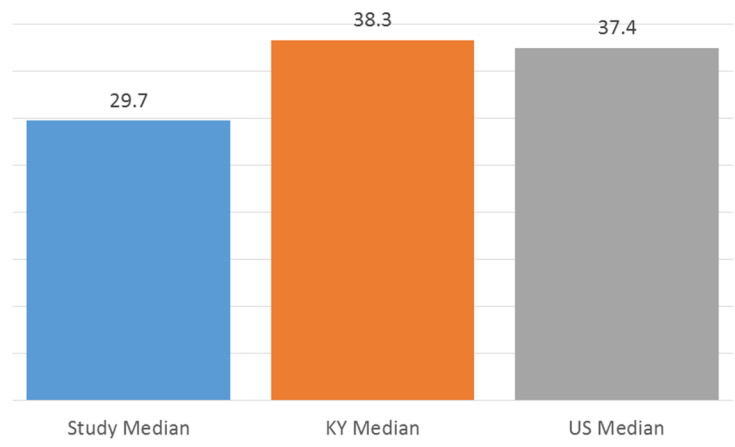


Figure 5: Diversion Students by Age

As shown in Table 4, for all offenders and for property offenders, median ages for males and females were about the same. The median ages for male Public Order and Violent offenders were slightly higher than for female offenders.

The median age for drug offenders in the study was significantly lower than for other types of offenders. And, interestingly the median age of male drug offenders was over five years younger than that for female drug offenders.

Diverted Offense	Male	Female
Drugs	22.5	27.9
Property	30.9	30.2
Public Order	31.7	29.9
Violent	33.9	29.1
All	29.4	29.8

Table 3: Median Ages by Offense

Of those rearrested, over half were rearrested within a year of their original diversion, while two-thirds were rearrested within two years.

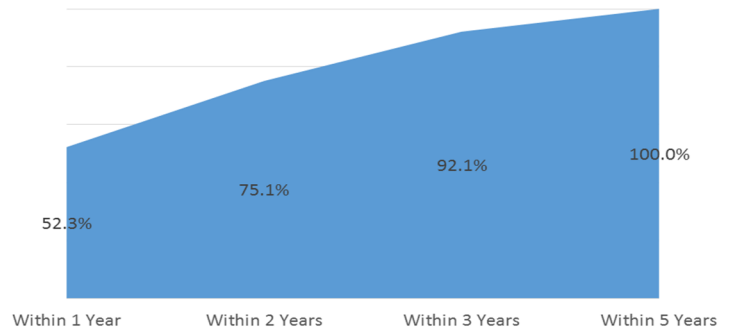


Figure 7: Time to Rearrest

## RECIDIVISM

While recidivism can be defined by a number of different standards, this study uses any arrest, after completion of a diversion, regardless of the disposition of the subsequent case.

We also looked at “Offense Rearrests” which would be an arrest for the same type of offense as was originally diverted, as well as a third arrest for any type of offense.

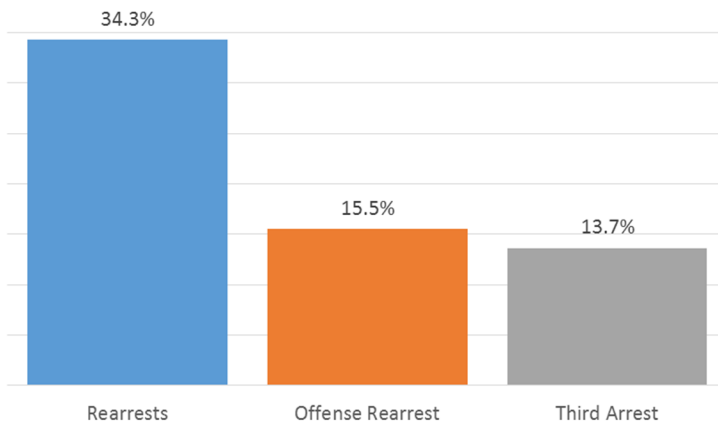


Figure 6: 5-Year Recidivism Rates

Overall, for all cases studied, 34.3% of defendants who took an Advent online course were subsequently re-arrested for another offense within 5 years of having their original charge diverted.

Only 15.5% of those diverted went on to commit the same type of offense within a five year period. Finally, 13.7% of those diverted had at least a third charge within five years of being diverted.

By calculating the elapsed time between the original diversion date and the time to new arrest, we were able to determine the following standard recidivism rates for Advent online courses.

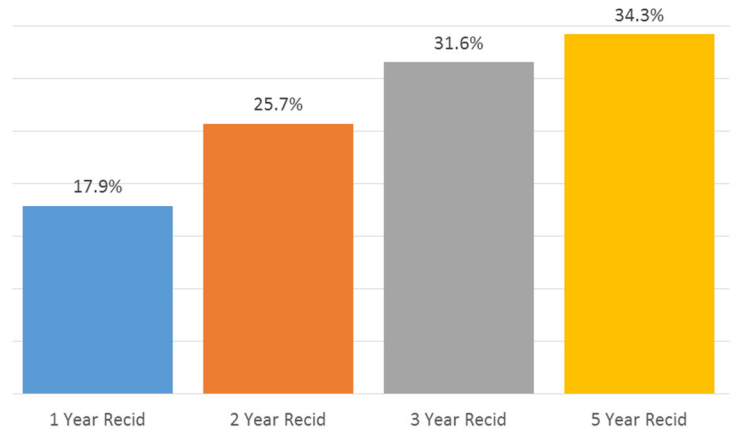


Figure 8: Recidivism Rates by Time

As will be discussed later, different agencies and authorities benchmark recidivism by different measures of time to re-arrest, time to re-incarceration, etc. For purposes of this analysis, Advent’s online courses have a two-year recidivism rate of 25.7% and a three-year rate of 31.6%.

## RECIDIVISM BY COURSE

Over the five-year period of the study, the rate of re-arrest was largely consistent among offenders regardless of which online course they took (33.5 to 35.0%). Not surprisingly, those taking Substance Abuse courses for alcohol or drug arrests had a significantly higher rate of re-arrest for the same type of offense.

Interestingly, those taking Shoplifting courses had the lowest rate of Offense Rearrest, but the highest rate of third arrest. An informal review of the data would indicate that most second or third arrests of shoplifting offenders revealed an underlying substance abuse problem (typically methamphetamines) that likely contributed to the initial theft offense.

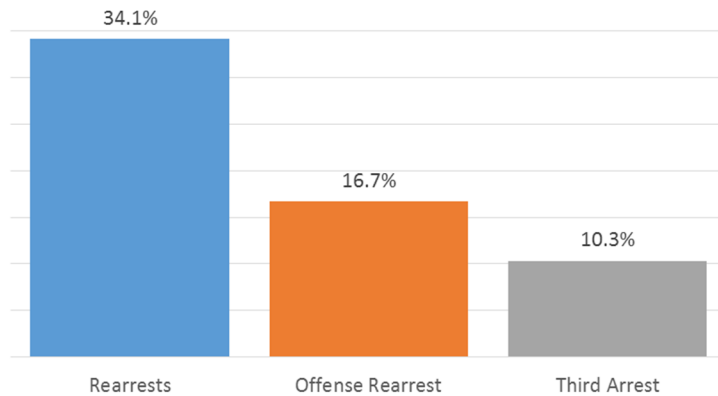


Figure 9: Anger Management Recidivism

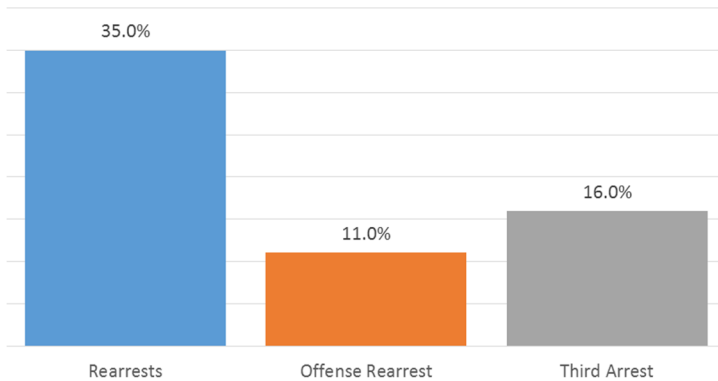


Figure 10: Shoplifting Recidivism Rate

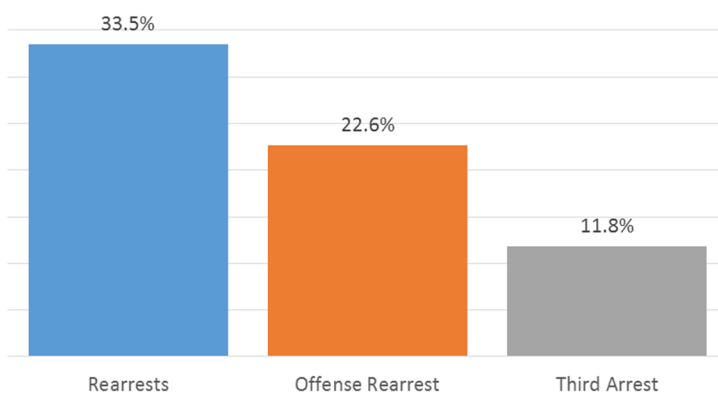


Figure 11: Substance Abuse Recidivism

## RECIDIVISM BY OFFENSE

When re-arrest time is compared to the original diverted offense, it appears that most with drug or alcohol diversions reoffend within three years. But those being treated for theft or violent offenses were often rearrested four or five years after treatment.

Diverted Offense	6 mos	1 Year	2 Years	3 Years	4 Years	5 Years
<b>Drugs</b>	11.8%	18.1%	26.0%	33.1%	34.6%	34.6%
Marijuana	9.7%	18.1%	27.8%	33.3%	36.1%	36.1%
Other Drugs	17.8%	22.2%	28.9%	40.0%	40.0%	40.0%
Paraphernalia	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Property</b>	11.0%	19.1%	27.1%	32.6%	34.5%	34.8%
Shoplifting	11.3%	19.4%	27.6%	33.2%	35.2%	35.5%
Other Theft	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Public Order</b>	7.5%	13.3%	20.8%	21.7%	21.7%	21.7%
Alcohol Offenses	10.6%	17.6%	28.2%	29.4%	29.4%	29.4%
Other Offenses	0.0%	2.9%	2.9%	2.9%	2.9%	2.9%
<b>Violent</b>	8.6%	20.4%	31.2%	38.7%	45.2%	46.2%
Assault	8.6%	20.4%	31.2%	38.7%	45.2%	46.2%

Table 4: Rearrest by offense type

When compared to data from the KY Department of Corrections, the Advent rates of re-arrest are notably lower than for those released from incarceration.

Crime	Study (release year)	2 Years	3 Years
Drug	AdventFS (2012-14) <sup>1</sup>	26.0%	33.1%
	KOOL LoR (2010) <sup>2</sup>	30.5%	37.8%
	KY DoC (2012) <sup>3</sup>	31.6%	
Property*	AdventFS (2012-14) <sup>1</sup>	27.1%	32.6%
	KOOL LoR (2010) <sup>2</sup>	30.1%	37.3%
	KY DoC (2012) <sup>3</sup>	44.4%	
Public	AdventFS (2012-14) <sup>1</sup>	20.8%	21.7%
	KOOL LoR (2008) <sup>2</sup>	22.2%	33.3%
	KY DoC (2012) <sup>3</sup>	33.3%	
Violent**	AdventFS (2012-14) <sup>1</sup>	31.2%	38.7%
	KOOL LoR (2010) <sup>2</sup>	40.8%	46.7%
	KY DoC (2012) <sup>3</sup>	37.3%	
All	AdventFS (2012-14) <sup>1</sup>	25.7%	31.6%
	KOOL LoR (2010) <sup>2</sup>	39.2%	46.4%
	KY DoC (2012) <sup>3</sup>	37.2%	

1 AdventFS diversion course data  
 2 Kentucky Online Offender Lookup data  
 3 KY Department of Corrections, January 2015  
 \* Property crimes excluding burglary  
 \*\* Violent crimes excluding murder and aggravated assault

Table 5: Offense Comparison to Other Studies

Both the Kentucky Online Lookup “Likelihood of Re-incarceration” database and the January 2015 KY DOC report use the Department’s sentencing and supervision data to establish 2 and 3-year recidivism rates. It should be noted that re-incarceration can occur for both new offenses as well as for violation of supervision terms.

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## CONCLUSION

While many criminal justice professionals have embraced evidenced-based treatments for low-level criminal offenders, governments continue to struggle with the costs of jail overcrowding and high court case loads.

Various programs for diversions, deferred adjudications, and community supervision have been implemented across the country to assist with these issues. However, many of these programs still rely on costly and inconvenient classroom delivery of treatment, while lower-cost and more convenient online programs using well-established CBT principles are becoming more widely available.

While much more research is needed on the effectiveness of online treatment versus face-to-face, online instruction has become well accepted within academia and other areas of instruction, and that would seem to translate to online treatment in the criminal justice system as well.

This research suggests that the use of online treatment for prosecutor and court-ordered misdemeanor diversions in Kentucky has proven to be much more effective in changing negative behaviors than incarceration would have been for these offenders.

Implicit in this data is that first-time and low-level offenders without drug or alcohol addictions were largely able to go on with their lives without exposure to the harsh and negatively-instructive environment of incarceration, without a conviction on their criminal records, and with the opportunity to expunge arrest records in the future.

In turn, these communities were able to forego many court and incarceration costs in these cases largely without introducing undue risks to the community.

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## ACKNOWLEDGEMENTS

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