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Early Intervention Systems: An Evaluative Review of Their History and Use

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EARLY INTERVENTION SYSTEMS:

AN EVALUATIVE REVIEW OF THEIR HISTORY AND USE

by

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A thesis submitted in partial fulfillment of the requirements
for the Honors in the Major Program in Criminal Justice
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at the University of Central Florida
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Abstract

It is my intention with this thesis to effectively describe what is known about Early Intervention systems to date. Many sources of information are used, beginning with peer reviewed journals such as *Justice Quarterly, Police Quarterly*, *Policing: An International Journal of Police Strategies & Management*, *Police and Society* and *The American Journal of Criminal Justice*. Also reports from criminal justice research affiliates will be used like the *National Institute of Justice* and the *National Criminal Justice Reference Service*. This thesis will work toward creating a comprehensive outline of the history of EI and future possibilities. With the aid of extant research, inquiries into the effectiveness of various EI systems, their shortcomings, or even best practices will be addressed. The aim is to review the existing discussion essentially paving the way for future researchers to conduct primary research studies on EI effectiveness. By accumulating, and subsequently compiling available research, the hope is to identify key arguments and perspectives on these systems and their implementation.

Dedication

To my family, friends, and colleagues who have served and continue to serve as a supportive
framework for my goals and ambitions

Acknowledgements

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Introduction

There is something to be said about being in control: the word itself speaks both to the power of influence over others, as well as an ability to supervise how something is run. It is only natural that those who are given power should also be supervised. The tragedy of abuse which can occur when power is left unchecked has, and continues, to be seen. As a developed nation, the struggle between power and liberty is constant. In this metaphor, police accountability holds a significant place among those gaps. Policing is the primary force of formal social control in our nation, occupying a rare position, which is authorized to forcibly require others to comply should the situation call for such (Bittner, 1970). The potential for abuse of power is high. Over time, discussions of police culture, discretion, professionalism, and the like have persisted (Walker, Alpert, & Kenny, 2004). Each continues to contribute necessary controls to curb abuse and to ensure liberty has its place among security and protection. However, these explanations continue to foster a void, one which leads to the extensive study of police accountability and methods of reform. While excessive force or physical abuse of authority in policing is not the sole impetus for the advent of police reform, they are both major players. It should be noted that this 'violence' is a relative term when it comes to policing – having its place neatly between compliance and abuse; that is to say a continuum of force is in place which outlines what response is acceptable, which may be necessary, and when a threshold has been crossed into that which is excessive (Terrill, 2001). With the progression of time even more issues have emerged.

Underdeveloped areas in both policy and departmental values continue to weaken accountability measures, which require reform. This might be exemplified by the many governmental or independent reviews and interventions in both policing and the criminal justice

system. For example, the Christopher Commission was an independent study of the Los Angeles Police Department during April of 1993 in the wake of the Rodney King incident (Independent Commission on the Los Angeles Police Department, 1991). This commission identified that a small group of officers were responsible for the majority, or a disproportionate number, of complaints within the department. As a result, the 'bad apple' theory of policing emerged whereby the select few misrepresent the department as a whole and weaken social cohesion with the surrounding community (Harris, 2009). Implementation of this theory is exemplified by the accountability system used by the Chicago Police Department becoming known as the "Bad Apple Picker." This system attributes numerical values to risk factors which flag the possibility of future misconduct among officers and in turn predicts if and when an officer might need to receive counseling (Stix, 1994). Also of note is Section 14141, a provision of the Violent Crime Control and Law Enforcement Act of 1994. This act was passed by Congress - motivated by a desire to 'rope in' police departments who had been "engaged in patterns or practices of conduct…which deprived persons of rights, privileges, or immunities protected by the Constitution" (Davis, Henderson, and Ortiz, 2005, p. 41). Under the jurisdiction of the attorney general, it allowed the federal government to intervene on behalf of the state and reform area police departments utilizing either consent decrees (serving a supervisory role to curb misconduct through change) or the more conciliatory Memorandum of Agreements (serving to counsel departments to create a strategy of reform) (Ross, & Parke, 2009).

A relatively recent idea has emerged among police organizations: the implementation of Early Warning (EW) systems, later referred to as Early Intervention (EI) systems. These systems are meant to monitor officers on a variety of factors. Should an individual gain multiple

infractions by the varying system standards, s/he is flagged and referred for review or sanction depending upon the particular department's policy. However, reviews of such systems have noted that informal measures are more common (Walker, 2005a).

The question remains, are there effective EI/EW systems? The notion of a system like this is not completely foreign to ideas of police accountability. The need itself for evidence-based management systems may have been realized as early as when the Department of Justice sought to observe police departments in pursuit of their external oversight of them (Henderson & Ortiz, 2005). In fact, Chicago's "Bad-Apple Picker" may have paved the way for assigning numerical weight to factors of evaluation, with respect to officer accountability, for determining if intervention is needed.

Regardless, the culmination of these events, interventions, and change in best practices have created an environment conducive to the introduction of systems such as EI in policing. It is in this way that the aforementioned changing landscape in policing would become responsible for facilitating their introduction. This would further alter the environment of policing, sparking newfound interest in researching these topics, and finding even better solutions such as the shift from individual discipline to a broader focus on creating an environment of professionalism that far outstrips the initial goals of those responsible for professional police reform in the 1970's (Walker, 2005b). With the remembrance of flashpoint instances such as Rodney King, or the more recent events of Michael Brown in Ferguson, Missouri and Eric Garner in New York City, police accountability has consistently been called into question by governmental entities, the public, and the media.

It is the purpose of this thesis to assess what is known on EI systems as an accountability tool in policing, as well as their capabilities or overall effectiveness. Due to the novelty of EI and its lack of widespread research, this thesis will serve not only as a review of existing knowledge, but an attempt to identify the overarching themes surrounding this measure as both an accountability mechanism and a measure of performance. It is the aim of this research that identifiable themes will emerge as a result - alluding to the state of research surrounding EI systems, where they are lacking, why they may be lacking, how they have been implemented, or any other relevant material that may give future research a better idea of what has been empirically verified and areas that may still require conclusive findings.

Literature on EI Systems

EI systems, like EW systems before them, are designed to monitor and respond to potentially problematic police behavior before it escalates to full blown abuses of authority. As will be discussed later, these systems include a number of behavioral indicators, thresholds for unacceptable levels across such indicators, and interventions designed to then remedy such. Existing research does attest to their effectiveness. Walker (2003) suggests that EI as an accountability tool fills the needs of departments today by effectively reforming problem officers (p. 3-52). Still others call for further research on EI systems, or outline the extreme lack of research on them (Sharback, 2015; Walker, 2001; Walker, & Milligan, 2006). The reason for this is that many aspects of these systems are still being debated. For example, Walker et al. (2001) have begun examining the levels of commitment required by administrators in these systems as well as effective indicators to be used by them. This is necessary because it has been found that many police reforms have failed to endure over time; EI being no exception. Chanin (2014), specifically, has noted that the failure of many systems to do just that is because they require an institutionalization of reform in order to last. This institutionalization is not unique to EI systems, however, departmental commitment required by EI systems is of a unique higher importance as it is a central component in ensuring the reform is actively utilized and not simply fading away over time. This burden may rest wholly on administration or can just as likely be a responsibility of everyone within the department.

Other areas lacking research include how indicators (of potentially problematic behavior) might be determined. Kim, Bazely, and Mieczkowski (2006) have evaluated what indicators may be effective by comparing them to subsequent results and successes in the EI systems. Others have

explored issues of reliability within indicators which are a part of EI systems: for example, McCluskey and Terrill (2005) when they assess the nature of citizen complaints and their relationship to both perceived and actual levels of coercion utilized by officers, as well as how an arrestee's or onlooker's perspective may color certain actions. Another is White and Kane (2013), when they examine protective and risk factors of officers and their relation to pathways of career-ending police misconduct. Also Harris (2009), when he examines how issues in performance peak alongside variability within an officer's proneness to continue to exhibit problem behaviors or to cease having behavioral issues altogether. Each take on different aspects of behavioral analysis of officers and what kind of implications they may have as far as predicting future misconduct or how questionable their reliability may be as indicators. This information may lend itself to finding better evaluative indicators for EI systems.

While the bulk of the research is concerned with that listed above, or the effectiveness of the system altogether, it is not the only thing researchers are exploring. For instance, some have inquired as to how these systems aid departments that have failed themselves. Davis, Henderson, and Ortiz (2005) do so when exploring if federal intervention could bring lasting improvement – the authors explain that many departments instituting systems to track officer performance and behavior allow for external entities to effectively monitor and control departmental behavior (p. 40-42). Others echo this claim when examining federal intervention, such as Ross and Parke (2009), in pointing out the importance of data driven information management systems to aid those interventions.

A Closer Look into the Advent of EW and EI Systems

The notion of early warning itself is not unique to policing, but over time has spanned numerous disciplines and purposes (e.g., extreme weather, vector-borne disease outbreak, geological hazards, environmental degradation) dealing with both natural and human-induced hazards (Glantz, 2004). However, within policing, EI is something which has been cited and utilized since the 1970s – beginning with both the Miami and Miami Dade County police (Walker, 2005a). These departments have the oldest and longest used systems of their type as compared to any other intervention system. Additional forms of EI systems were short lived, with even fewer having survived to the present (Archbold, 2013). With time, the base of research within this area of police accountability, while small, has been slowly expanding. As of now, there are a handful of researchers who have created detailed information sources on the implementation of EI systems and their uses (e.g., Walker, 2005; Walker & Milligan, 2006.). Endorsements of EI systems by organizations of deference in the criminal justice field also exist (e.g., U.S. Department of Justice, 2001; U.S. Commission on Civil Rights, 1981; International Association of Chiefs of Police [IACP], 2009.).

With early intervention being applied to criminals, such as the large base of study for crime prevention (i.e., primary, secondary, and tertiary), and juveniles, like "scared-straight programs", it might be unrealistic to think that this philosophy would not also reach policing. Even more so as it remains an area where reform has yet to completely quell the issues of abuse of authority and/or corruption within departments (Stephens, 2011). Some have even described these systems as the 'new paradigm' of accountability. That is, one which replaces external punishment with institutionalized professionalism and formal sanction with informal treatment; inadvertently the

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success of these systems both create and rely on an enhanced sense of accountability within the department (Walker, 2003). This paradigm shift is characterized by the coming together of past reform efforts, techniques, and discipline measures.

With this shift, and with accountability growing into popular practice, many new implementations have taken place – both literally and in the ideals which are popularly represented. For example, accountability used to be reactive and half-hearted stopgap measures. Whereas they now have evolved within many departments to instead help each become self-aware, self-monitoring, and proactive in preventing issues relating to lack of accountability. The advent of EI systems could be termed just one expression of such, but it is of current the one which is of most interest to this thesis.

Defining the relationship between EI systems and EW systems

Often times EI systems and EW systems are presented as one in the same. The terms may even be used interchangeably; however, there are subtle differences. EW systems have been defined as a "tool designed to identify officers whose behavior is problematic and to provide a form of intervention to correct that behavior" (Hughes & Andre, 2007). EI systems are defined as a "performance database that permits police managers to identify officers with patterns of problematic conduct and then to provide specially tailored interventions designed to correct those conduct problems" (Walker, 2003). When taking the above into account, it could be said that there are few differences between the two; this is true. However, each go by different names. The reason is that EI systems have come to replace EW systems in name as well as with a modified purpose. Early intervention serves as a euphemism suggesting the modernized conceptualization of these systems and their purpose. This is meant to reorient them from a system of punishment to the more proactive and rehabilitative nature they are meant to take on. The simple change of name is meant to communicate just that and to eliminate any negative connotation either within research circles or police departments in which the system is implemented (Walker, 2005). It should be noted that definitions of EI systems make special mention of things such as 'specially tailored' interventions and the inclusion of police managers as an integral part of the system. EI also seems to place a larger emphasis on computerized systems or at least the data-gathering methods they employ. This may be explained by the modern current in policing research which advocates researching what matters. As a result, many studies utilize tangible figures of measurement (e.g., arrest data, COMPSTAT data, use of force data), which will then be used to gauge levels of the institutionalization and effectiveness of organizational reform (Chanin, 2014). As these systems

have developed, they are no longer limited to issues of misconduct, but have also instituted an ability to track officer performance; including when an officer is performing well. This can be seen in the systems' ability to recognize high-performing officers, track trends in officer behavior to indicate important changes, and perhaps even differentiate between officers who are productive and those who are abusing power (e.g., due to varied levels of activity, jurisdiction size, and assignment) (Walker, 2007). To that end, the importance of data driven information management systems has been cited by some as crucial to providing useful information about the activities of officers and supervisors within a police department (Ross & Parke, 2009). This alludes to a use not only as an accountability mechanism, but as a research tool as well.

Research Strategy and Aims

It is the intention of this thesis to effectively describe what is known about EI systems to date. Many sources of information are used, beginning with peer reviewed journals such as *Justice Quarterly, Police Quarterly*, *Policing: An International Journal of Police Strategies & Management*, *Police and Society* and *The American Journal of Criminal Justice*. Also reports from criminal justice research affiliates will be used like the *National Institute of Justice* and the *National Criminal Justice Reference Service*. While many have utilized existing research to speculate on the benefits or shortcomings of EI systems, this thesis works toward creating a comprehensive outline of the history of EI and future possibilities. With the aid of extant research, inquiries into the effectiveness of various EI systems, their shortcomings, or even best practices will be addressed. The aim is to review the existing discussion essentially paving the way for future researchers to conduct primary studies on EI effectiveness. By accumulating, and subsequently compiling available research, the hope is to identify key arguments and perspectives on these systems and their implementation. It is plainly observable that existing research occupies a niche which goes largely untouched. In fact, given recent events and the renewed scrutiny of police departments nationwide, a study such as this is timely. Now that a general idea of what these systems are and may be capable of, it is important to take a deeper look into the considerations needed in order to further establish them.

The Structural Components of EI Systems

EI Indicators

While the systematic process of EI systems follow similar patterns of planning and design as risk management and crime prevention models, its dynamic nature and reliance on constant re-evaluation requires a greater attention to detail. Criteria of selection, known as *indicators*, for which officers may qualify for intervention may stand alone or may simply be a factor in a larger calculus of evaluation (Gibbs & Kendrick, 2011; Hussey, 2002). For instance, while an excessive amount of use of force may stand as a single indicator, other elements such as leaving shifts early may need to be coupled with factors such as an inclination towards binge drinking, a decline in sociability, and increases in vehicular damage to suggest need for intervention.

However, compiling and subsequently grouping factors may not be the only way to ensure accurate predictions of problem behavior. Ede, Homel, and Prenzler (2002) found that single factors, like officer complaints, could be differentiated by unit size, which they referred to as *task environments*, and then analyzed by concentration and prevalence. In this way high concentrations of complaints denoted a small group responsible for a majority of the complaints and a high prevalence suggested a more diffuse problem stemming from something such as negative workplace culture. The latter changes mere statistical data into information that is carefully calculated to be even more useful: a viable alternative to simply expanding an EI system's indicators. As such, the system contends with only a few indicators but at the same time ensures each is carefully considered to be most effective. Macintyre, Prenzler, and Chapman (2008) explain their version of this process as *strategic intelligence*. They make the argument that any factor of evaluation of officer behavior can be effective but must be coupled with as much

information as possible in order to be actionable and/or accurate. The differing views among scholars here sheds light on a deeper problem which continues to plague EI systems: a need for marker-behavior indicators which would accurately identify problem officers. To be more precise, this would mean accurate indicators for identifying an *at-risk officer*. It is yet to be seen if this means an increase in indicators considered, exhaustive information collection when utilizing a single indicator, or a more in-depth evaluation process. It is most likely some combination of each and will largely depend on a departments needs and considerations. At the very least, many departments have realized an EI system cannot function effectively off of one statistical criterion.

In fact, research has continually occupied itself with a strong focus on indicators utilized (e.g., Alpert & Walker, 2000; Andre, 2007; Macintyre, et al., 2008; Moore, 2003). This is meant to ensure that an increase in or violation of any system indicator is a clear sign of growing behavioral issues rather than some special circumstance. This is evidenced by the fact that even major staples of EI systems have their criticisms. Arnold (2001) serves as one of those critics with his thoughts on officer complaints as an evaluation tool for officer behavior. In his report he states that use of citizen complaints is "one of the most badly abused police-based statistics" (p.82). For instance, we might acknowledge the many complaints which are not sustained. Other perspectives offer similar claims, such as Moore (2003) when referencing the San Jose Police Department's EI system which is strictly complaint driven (i.e. number of officer complaints received by the Internal Affairs unit). He states that such a system encounters an extreme lacking in a capacity to capture a variety of other at-risk behaviors for officers. Both of these mark the body of research which suggests EI systems have an obligation to track multiple and varied indicators to be

worthwhile. We might make note of Walker who has found many existing systems utilize as few as eight or as many as 24 indicators (Walker, 2005a).

Moving forward, many proponents have also stated that the selection of these indicators should be individualized within each department – but this may stand as more of a necessity than best practice. The effectiveness of EI systems hinge on the very definition of "early", described by Walker and Alpert (2000) as "the sense that a department acts on the basis of performance indicators that do not necessarily warrant formal disciplinary action" (p. 60). This is as opposed to an ex post facto disciplinary review. If factors which are utilized by a department's EI system fail to capture those officers prone to future misconduct, fail to alert central or localized management personnel in a timely manner, or incorrectly flag officers who have no expectation of future misconduct, the very purpose of the system will have been undermined (Lersch, Bazley, & Mieczkowski, 2009). Rippling effects could essentially cripple faith in the system, lessen commitment by first-line supervisors, slow departmental funding, or waste valuable resources with nothing to show in return.

The Varying Types of EI Indicators

When discussing specific indicators there is no single list. In fact, this is part of the reason for which EI systems are so varied and generalized study has proved so elusive. At the same time though, indicators in an EI system usually includes much of what one might expect. Paul Schultz (1993) points this out when stating "the most commonly included indicators are citizen complaints, use-of-force reports, and firearm discharges" (p. 2). In a national study based on 243 departments that utilized EI, Paoline, Worden, McLean, & Krupa (2015), note the most common factors among all that are implemented were: citizen complaints, non-lethal force, internal complaints, vehicle

damage/accidents, and internal investigation. However, systems which are more complex go even further in the types of things they monitor, such as deficiencies in report writing, poor preparation for court appearances, and even sick time (Hussey, 2002).

Larger systems take into account even broader facets of officer behavior. One example of such broader focuses may include the officer's social temperament towards his/her department (Gibbs & Kendrick, 2011). To elaborate, if an officer is constantly turning in poor reports it may not signify a behavioral issue explicitly, but it could signal a drop in morale, a distaste for his/her department, a lack of precision in following protocol or any number of things that mean the officer has lost motivation to do things properly or to accurately carry out job responsibilities. Thus, these larger systems function as ones which not only track officer interactions with the public at large, but also attempt to evaluate the individual personally. These more far-reaching factors may even uncover an officer who is unhappy. This is something especially important since continued unhappiness can translate to cynicism, improper behavior, corrupt behavior, or possibly excessive use of force. To further this point, consider Fyfe's (2005) distinction between *extralegal violence* (popularly termed brutality) and *unnecessary force*. While the first is a willful and knowing exertion of force beyond the bounds of proper police conduct, the other is a result of ineptitude or carelessness resulting in force applied too hastily or needlessly and absent a malicious intention (pp.165-180). Such far-reaching indicators, mentioned above, may do well to capture the inept or discouraged officer more prone to force applied due to a lack of care or concern whereas those considered core to EI systems may lend themselves to more pressing matters such as a prejudiced officer. The overall point is, even less targeted indicators may hold value as far as identifying officers who may have some sort of problem.

Why Move Towards a Comprehensive List of EI Indicators?

Unfortunately, present research is still trying to specify what indicators can or should be used in an EI system. It is unclear if this will result in some agreed upon list or varying recommendations. In the case that a comprehensive list of available and effective indicators is created, it may aid in the implementation and future study of EI systems. The difficult part, then, lies in establishing said list. To this end much of the research reviewed seems to diverge down two paths: those which are attempting to understand the policy of EI systems and those looking to establish their effectiveness (Walker, 2007). Each are equally important because without established synergy between them neither will be accomplished. For example, simply establishing use of force as a relative and predictive factor of officer behavior means nothing if policies establishing use of force only include physical manifestations. This same logic goes for complaints against an officer as well. If no merit is given to those complaints not sustained, a blind eye may be turned in a system which only acknowledges sustained complaints while at the same time failing to account for the fact that complaint processes in the department are archaic and difficult to access. This very issue occurred in Chicago when a program, in the wake of officer misconduct, was found to be wholly incompetent (Newman, 2015). Just as effective indicators will be affected by the thresholds and analysis that surround them (discussed later), they will also be reliant on departmental policies that they operate in. It could be said that if real ambitions existed to implement EI systems nationwide, criminal justice personnel will be forced to take on the variations in departmental policy which has existed unresolved for decades.

Other newer studies are also trying to delineate what existing EI systems are utilizing most often when established (Paoline et al., 2015). The hope is that once a more concrete list of measures has been uncovered, research can focus more pointedly on which of them achieve the following:

- The predictive utility of the factor(s)

- The timeliness of the factor(s) in predicting escalations in negative behavior

At this time, it is unknown if studies progressing in the above way will ultimately lead to definitive evaluations of the effectiveness of any single indicator; at least for the purpose of generalized or comprehensive study. As current research continues to first establish what indictors are utilized most often, followed by analysis on the effectiveness of them via quantitative analysis, it may become a self-fulfilling prophecy. As agencies that implement these systems regularly consult literature on what may serve as standard measures in them, while at the same time later submitting to survey research, the focus may be narrowed too quickly. For example, a department consults existing research on EI systems and, as a result, decides to implement indicators X, Y, and Z. This same department is later recorded in a survey conducted by researchers who will ultimately publish articles referencing indicators X, Y, and Z. As a result, these indicators have just increased in prevalence (with regard to their exposure) in an exponential way; to include the original studies the department had consulted and those resulting from the department's later study. At some point they may even be elevated to levels of anonymous acceptance because of this increased prevalence and, with no standardized list to dispute them, will continue to be implemented further with no solid foundation to explain *why*. To clarify, the issue is not so much that those indicators which are more established in literature will be used more often in a cyclical way, but that other, less established measures will be ignored when they may be just as beneficial.

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Regardless, continuing to extrapolate the most common measures of EI systems and later researching the overall effectiveness of the system may still prove ineffective at assessing the efficacy of that measure. For example, how would researchers isolate the indicator itself as the contribution to a successful EI system? To elaborate, the very measurement of something like use of force alone comes with a long list of academic debate such as how an organization's policy may affect its level of reporting, accurate or otherwise. Beyond that, even if we accept use of force as a consistent measure in and of itself, the efficacy of the indicators within the EI system will also depend on how they work in concert with established thresholds, as well as the overall evaluation of said data (such as secondary review). Research should, instead, take more open minded approaches when examining which factors can serve as viable predictors of officer behavior, whether by themselves or when combined. This may even lead to certain accepted standards of EI systems, allowing them to establish accreditation methods for the system.

This type of standardization would still allow for deviations, determined by how indicators are measured in relation to thresholds and other data analysis techniques, while at the same time potentially ushering in national implementation of the system. Just as we saw EI systems multiply in the wake of federal consent decrees and memorandums (Davis, Henderson, and Ortiz, 2004), we may again see their use at every departmental level if they accomplished increased levels of standardization. It should not be feared that standardization may inhibit systems' catering to a department's needs as each department would still have discretion over which indicators to choose, how they are measured, and when or how intervention is administered.

Crafting a comprehensive list of indicators will deal with discrepancies in existing policy and outlooks within criminal justice personnel early on. By addressing these issues first, once

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indicators have been selected, it will be known that each come with a certain amount of *baggage* (for lack of a better metaphor). It will be plainly put which types of definitions, interpretations in policy, and considerations must be in place when evaluating an officer on any one indicator or some combination of them. This allows for a foundation of the system to be established which can then move forward in adding, refining, or removing indicators which are too broad, ineffective, too hard to isolate, or too volatile with regard to making accurate and timely officer predictions.

Alternatives in Assessing Indicator Effectiveness

When EI systems were first created, they were based on philosophies of deterrence as well as some aspects of labeling theories (Alpert & Walker, 2000). Here a combination of stigma, shame, and intervention would eventually alter the officer's behavior to socialize him or her toward more acceptable practices. Granted, this was prior to the reconceptualization of the systems to be less focused on simply singling out "bad apples." However, another notable change in the systems has come about as a result. Systems previously based their indicators on broader, more abstract things like psychological evaluations. These led to qualitative measures like: "squad concerns about an officer hurting someone, an officer who has nicknames stemming from the use of forceful arrests, an officer's arrestees' injuries, and an increase in an officer's insubordinate behavior" (Andre, 2007, p. 25). As EI systems have evolved into what they are today, they have become even more efficient in terms of data management techniques and quantitatively focused measures which are conducive to such (Smith & Austin, 2015). Why is it then that research, still lacking an identifiable list of accepted indicators, continues moving towards only studying what is currently in use within EI systems. Likewise, of those guides offering insight into implementing EI systems, many state that indicators are to be created at the discretion of the department (e.g., Walker, 2005a;

Schultz, 2012; Walker & Milligan, 2006; OPI, 2008). Perhaps, instead, research should continue to focus on types of qualitative predictors of officer behavior which can then be operationalized, quantified, and accurately measured.

By moving through the research process in this way, not only can researchers account for ways in which other factors may weaken those measures, they may also reach a closer true definition of how effective those measures are at predicting officer misconduct. It is hardly coincidence that based on the studies thus far, those indicators which are most prevalent are those for which the most literature exists as far as how they should be measured, potential biases in their measures, and how they may lend to predicting officer behavior (Lersch et al., 2009). Again, the most important factor when selecting indicators within an EI system is their validity and reliability. If a criterion validity cannot be established first it will not matter in the more specific realm of being conducive to the departmental needs. If any type of consensus is going to be reached as to what indicators should be utilized most often in EI systems, regardless of departmental factors and the like, it might not be found simply studying existing systems. Just as there are cases of success, there are also cases of failure – none of which can be appropriated entirely to the indicator(s) used.

See Appendix A for a full list of departmental indicators in existing EI systems based on the works of (Blau, Super, & Brady, 1993; Schultz, 2012; Blau, 1994; Hussey, 2002; San Francisco Police Department, 2007; Paoline et al., 2015).

Options for Interpreting EI System Data

Moving forward, the way in which each standard of officer behavior is interpreted must be carefully thought out. For example, an evaluation of early intervention program indicators conducted by Lersch et al. (2009) revealed that those which were weighed and analyzed as opposed

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to being taken at face value seemed to have a greater accuracy in correctly identifying at-risk officers. Further, these allowed for a lesser frequency of inappropriately identifying officers whose conduct, in light of other factors, was not truly in need of intervention. Although this study focused only on use of force among officers, it speaks to the concept of creating processes and algorithms for collection of officer criteria as a means of obtaining more accurate and better founded results. This is best characterized in Worden et al. (2013) when they conclude: "We believe that the current structure of EI systems is not commensurate with the aspirations that their advocates have for them" (p. 24). Much of existing research calls for a new focus on the effectiveness of EI systems as well as more case studies; and for good reason. However, it should not be overlooked that EI systems have much to research in order to create a system which effectively evaluates complex criteria, but does so in a way which is streamlined to not inhibit departmental duties. Theoretically, this would not only increase their effectiveness when later evaluated but would also allow the introduction of fundamentally sound systems that are easily implemented.

When examining computerized software currently used to implement EI systems, discussed in depth later, many are simply Internal Affairs technologies that have now been updated to include EI capabilities. Even though they may allow for some analysis of entered data and implement simple tally systems for specified indicators, these systems leave most of the analysis up to those who utilize them. Put best, Stephens (2009) describes them as relational databases of personnel and complaint information which can then be mined to deduce relationships that might not otherwise be immediately evident (p.511). Granted, while many of these systems may then be exported to formats within Microsoft Excel for further analysis, it seems as though they do little to optimize EI practices. Once the luxury of standardized accepted indicators are created, it is

important that the focus shift to better options of analysis. Currently, many software systems act as simple tallies which places a large burden on management and implementing personnel to find some magic number which will flag officers early and appropriately in light of any number of considerations. These are termed thresholds and are discussed further in the next section. The point is, it may be these basic interpretations in data being used, maintained by current software, which results in some EI system failures.

Thresholds

By utilizing a broad range of effective indicators, the system stands a better chance of properly identifying officers with a genuinely problematic behavioral issue. At the same time, it is only with accurate ways of measuring these indicators that the system's overall goal is achieved. This distinct dimension of EI systems are known as *thresholds*. They are responsible for measuring the frequency of occurrences within some indicator across a specified time period. For example, while some departments may benefit from a longer period of evaluation, again referred to as thresholds (e.g. more than 5 use-of-force incidences in a two year period), others may benefit from a shorter period – especially if officer behavior is more volatile or must be tracked more closely. With larger thresholds it may be argued that flagged officers will have a higher propensity to having a genuine behavioral issue. However, these longer periods may eliminate the 'early' aspect of the system altogether; relegating EIS to yet another reactive measure comparable to earlier models of risk management (Newman, 2015). Conversely, a shorter period, while more timely, may inappropriately flag officers with too little evaluation or simply capture officers during a time of increased action due to proactive policing (Lersch, Bazley, & Mieczkowski, 2006).

Walker (2005a) offers insight here in identifying different ways of creating thresholds: Agency or department-wide simple quantitative indicators, peer-officer thresholds, and factor or multifactor performance ratios (p. 32-33). To elaborate, simple quantitative indicators might be something like identifying any officer with 5 or more citizen complaints in a 30-day period. This method addresses behavior in a way which tracks the frequency of indicators of an officer over some designated span of time. Ideally these indicators would be created to be effective evaluations relative to the departmental policy and in consideration of things such as frequency of calls for service and how active the department is as a whole. This type of threshold creation is the simplest and representative of early creations of EI systems (Walker, 2005a).

The second means of establishing thresholds mentioned above, peer officer averages, concentrate on officers on varying shifts or in varying jurisdictions and the fact that they may deal with dissimilar situations requiring unique accommodations in oversight (Walker, 2005a). For example, within the Orlando Police Department (OPD) it could be said that officers stationed in the downtown Orlando area, known as sectors D and F, experience higher rates of violent crime than their counterparts in more rural sectors (Neighborhood Scout, 2016). See Appendix B for full diagram of OPD sectors based on (City of Orlando, 2014). As a result they may come into contact with more situations where use of force is employed or arrests occur. Some have criticized this method as comparing 'apples to apples' which suggests that should those officers being compared to one another have the same behavioral issues none will be flagged nor will severe problem officers stand out as they should. Further, the point has been made that the acceptance of differing behavior as natural when working in a higher crime area may foster a simple myth which stifles proper training and intervention when needed (Stephens, 2011). On the other hand, this method

implements safeguards to prevent unnecessary interference with officers who are flagged merely because of their special assignment or because of their productivity or high call volume (Lersch, et al., 2006).

The last is performance indicator ratios which pose two factors against each other to isolate behavior which is problematic. This allows for a distinction between things such as high performing officers and those who are acting inappropriately – like when we create a ratio of use-of-force reports versus amount of arrests (Walker, 2005a).

Performance indicator ratios may hold the largest potential. This will be especially so in comprehensive systems which implement broader factors in need of joint consideration to develop accurate analyses. As capabilities grow, these types of thresholds will allow multiple factors to be considered in succession as well as varying combinations of those same factors. In this way, insight can be given to multiple aspects of officer behavior. For example, combining an officer's report writing, vacation time, sick time, and time taken in succession may show a trend towards the officer's apathy for his workplace, department, supervisor, or any number of reasons for an increased absence of mind and presence. At the same time, vacation time or sick time coupled with things such as an officer involved shooting or officer discharges may uncover a trend towards an emotional battering experienced by the officer due to some traumatic event. As many EI systems are seen as data management tools with administrators as their miners, it is important that the data be as flexible as possible so that supervisors and management may use their own wit and experience to exhaust its potential. Alternatively, other options might include quantitative data that is not simply compared to a particular threshold but that is combined in ways to show the *level of proneness* an officer has for a decline in acceptable behaviors. Thus, not only are administrators

given notice of a need for intervention, but they can observe a trend towards that notice to allow them to act even more effectively. At the same time, they may also observe the trend reverse, resulting in no need for intervention despite a few hiccups along the way.

A frequency of any one indicator cannot be oversimplified to come to represent the bad and good in an officer. Instead it will always require further examination (McCluskey & Terrill, 2002). By relying on such strict interpretations of the data collected, done in an attempt to be uniform and concise, these systems have begun cheating their own potential. It might be well to argue that ultimately the decision will remain with the supervisors in charge of reviewing said data to instead prevent these issues, but the goal remains: to make data as efficient, flexible, and conducive to EI systems as possible. If we revisit Lersch et al. (2009), we notice they have already ventured into this territory. During their study, not only did they create a weighted factor which aided in more accurate portrayals of at-risk officers, their specificity in quantifying use of force lent itself to ensuring the variable was properly utilized. That is to say that it automatically accounted for issues such as increased levels of force due to accompanying levels of resistance. Point being: a measure which was weighted and statistically crafted automatically became more valid for the purposes of EI systems in that it accounted for previously cited weaknesses of the statistic. Beyond this, when comparing their data analysis to those officers flagged by the EI system under study they found that the results were nearly opposite. Those officers flagged did in fact incur more uses of force and may have benefitted from some intervention, but the data showed each time they used less force than the accompanying resistance experienced (p. 119-121). On the other hand, some officers using excessive force as compared to resistance encountered were not flagged as they had fewer uses of force altogether. Perhaps, and the authors make this point, it is

the fact that they have experienced less resistant-driven situations that they are less experienced in enacting force (p. 120). Regardless, the point is that many factors in EI systems would do well to be calculated in this way or in a similar nature to create more effective data analysis and timely intervention strategies.

Other more recent research endeavors even make mention of *machine–learning algorithms*, a concept at the center of some new initiatives enacted by recent presidential directives (Smith & Austin, 2015). In fact, machine-learning algorithms and technologies are booming in and of themselves. As of now they are already employed for tasks such as making web searches more relevant and blood tests more accurate to dating services being more likely to find you a potential mate (Yaser, 2012, p. 78). The concept operates on an availability of data in which computer programs find consistencies in data and patterns to create decisions in the best interest of the client. For those programs which are successful, many have rivaled experts in their respective fields despite the scientists themselves having no prior knowledge on the subject area. These programs often use operating principles such as supervised learning, reinforcement learning, or unsupervised learning (Yaser, 2012). To understand the different types of algorithm based learning, the concept itself must first be understood. The basic operating principle is that an automated system will sift through data and aggregate it when possible to identify synonymous traits or patterns. It will then utilize these groupings to make larger patterns for the data toward some end – usually a prediction or consultation on some subject area (Yaser, 2012).

Supervised learning installs a researcher into the process who will curb those patterns in a way so that each prediction is given a correct answer to allow the system to calculate future algorithms more accurately. In this way the system will not spin out of control creating more and

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more abstract predictors that inject spuriousness, invalid groupings, or anything similar. A reinforcement learning approach is similar in that a researcher is involved during the process. However, this time around the researcher will reinforce the more accurate and successful algorithms so that the system may continually evolve based on those selected performances. This method will move progressively to reinforce decisions at varying stages once they have been reinforced in the prior. For example, if the system were to approach issue A and is reinforced to outcomes one and two it would then continue to delineate other processes based on those two routes from A to the next point of contention: B. In data sets with lesser prior knowledge a researcher may turn to the last form: unsupervised learning. In this way there are no existing assumptions about the data to guide the researcher in selecting more positive processes. Instead the data is freely analyzed by the system until it has created varying groupings to which the researchers may move forward in modifying to establish how the data is learned from (Yaser, 2012).

The overall point is that technologically driven solutions such as this may help in crafting more accurate EI systems. In fact, these types of systems have been in place for this very reason in other subject areas ranging from movie preferences offered to users of Netflix to those selected as reliable borrowers by creditors. There have even been implementations of these types of systems to criminal justice already. For instance, BLUE PALMS, implemented by the Miami-Dade Police Department, utilized a similar system to help predict suspect lists for cases with few leads or prior cold cases (International Business Machines Corporation [IBM], 2013). By analyzing key details of any one investigation, the system develops leads which it then operationalizes into a suspect list ranging from most likely to least. Many systems already organized to perform such tasks, including

those used in the realm of criminal justice, all bare an eerily similar purpose as does EI systems. Even more interesting is that many had previously been dependent on things of which EI systems are currently contending with: buy-in, trust, and proving their credibility and efficacy (IBM, 2013). Again, the point must be made that many of these systems have seen success and have led to analytically driven policing which has a long established history of success and innovation, whether that be through newer systems like BLUE PALMS, or older analytics such as crime hot spots. Police executives need to be more forthcoming about their needs and more open-minded to technological solutions more so than they already are. They need to begin operating as agencies which need technological solutions rather than personnel solutions so that EI systems can begin to operate as they need to in a realm with the most potential: technology, quantitative data, and algorithm based analysis.

How to Review Data for Recommendations of Intervention

What to do once indicators are in place also deserves attention. Just as uniformity does not exist in what indicators are used to track officer behavior, how collected data is reviewed by personnel is also developing. Many factors must be considered when collecting data in the first place and reliability on system generated flags alone may not be enough. While some suggest immediate referrals to informal intervention for those officers flagged, others propose that the officers' supervisor be notified to review those flags first (Stephens, 2011). Regardless of the method, explored in more depth later, these referrals will ultimately lead to the officer being subject to some corrective action for their negative behavior. As expected, these are termed *interventions*.

Presently, although not originally, these interventions have taken a remedial stance. Bertoia (2008) describes in his work how this type of approach makes more sense as opposed to punitive measures. He explains that based on the purpose of EI systems, meant to remedy issues in an informal context, remedial interventions are better served to making officers feel more comfortable admitting a problem, more conducive to rehabilitative functions, and more likely to foster positive connections between officers and supervisors or management (p. 5). Paoline et al. (2015) have found interventions which are in line with this philosophy, to include: counseling by an immediate supervisor, professional, or other command staff, additional training (on policy, tactics, or ethical considerations), or peer office support and crisis intervention teams. In fact, 89.3% of the departments they surveyed utilized counseling with an immediate supervisor. Walker (2005a) has stated intervention, with regard to supervisors, should entail a "combination of coach[ing] and train[ing], providing a delicate mix of support, criticism, and help" (p. 12). Bertoia (2008), lists possible interventions to include: coaching, mentoring, training and development, increased supervision, counselling, professional development, and change of shift (p. 5). As it can be seen, a common theme of training, counseling, and coaching permeate the intervention processes of EI systems. This makes sense as it is in line with maintaining functions of a system meant to curb officer behavior before it escalates to larger issues of abuse.

While intervention tactics are meant to be predominantly informal and non-punitive, they still encounter problems in implementation. Dempsey and Forst (2013) found that "many officers avoid employee assistance programs [EAPs] as they are not private enough" (p. 178). Additional criticisms of these programs are that they fail to encompass officers with certain issues as they are, traditionally, meant for those with psychological, marital, or substance abuse issues (Walker &

Alpert, 2000, p. 136). This is not meant to say that EAPs have no place in being utilized as an intervention strategy, but rather, that interventions must be carefully chosen and accurately prescribed and utilized.

Further, the above highlights the fact that these interventions require officers' trust during implementation to function (Ikerd & Walker, 2010). This is in spite of the fact that the notion of EI systems have always been advertised as informal and rehabilitative. No matter how much it is sold as such, if officers do not acknowledge these systems, or more specifically their interventions, as helpful and not hurtful, intervention practices may suffer the failure of being unable to *get through* to officers. This would, in effect, render them useless. As a result, *post-intervention monitoring* has been created to remedy just that. These periods of observation, after the initial intervention, allow for supervisors and management to ensure that the interventions being used are functioning correctly and making a substantive difference in the officer's behavior and actions. Post-intervention monitoring is discussed in more depth in later sections.

Overall, the intervention processes within EI systems are just as important as being able to accurately select problem officers. This is because if the problem is not remedied once noticed then there is truly no point in the system as a whole. It has been noted here that a remedial stance is more common among these interventions. While some may be angry with such a notion, upon first exposure, it must be remembered that these intervention strategies are being implemented prior to a true issue of conflict or abuse having arisen in a particular officer. Since it is the case that these systems are to remain as proactive ones, there can be no real punitive measure taken without some cost to the system as a result (e.g., degradation of trust within the system, loss of informality, loss of reform-based stance). There does seem to be a larger consensus on what

interventions may be used within these systems; however, there are still many questions as to which interventions should be used and when as well as if these interventions are addressing issues in officer behavior as needed.

Supervisory Control in Review Processes

Departments do not consistently utilize a single supervisor when reviewing collected data (Hussey, 2002). In fact, depending on the type of system in use, multiple supervisors may even be included. This is the case with the Miami Police Department's EI system. When an officer is identified by the system here his or her supervisor is notified and subsequently creates a memorandum recommending some sort of intervention (Walker, 2005a). This is then sent up the chain of command within its internal affairs department and requires each supervisor's agreement and endorsement along the way. As a result consensus throughout the organization as a whole might be achieved (Walker & Alpert, 2000). Still, reservations about such practices exist.

Others, such as Stephens (2011), when commenting on police discipline, feel as though processes which are highly bureaucratic like this invite animosity among personnel and weaken the very purpose of them. This is especially so when decisions are continuously overturned or disagreed upon. For example, were an officer to be flagged by the EI system, but not called for intervention until six months later, he/she may be confused as to why he/she is being subject to additional training or counseling, or feel as though it is unfair; especially if he or she has been commended for his/her behavior since then. Another approach worth considering is integrating support systems to ensure proper management rather than the aforementioned bureaucratic models. Revisiting Moore (2003), he provides an example with San Jose's Supervisors Intervention Program (SIP). The program ensures first-line supervisors are held accountable for failing to deal

with officer complaints by referring the supervisors themselves to review by higher chains of command when appropriate. EI systems could even take this proactive stance when ensuring supervisory cooperation. This would further satisfy the necessity of first-line supervisors' commitment as is needed with any police reform (Walker & Milligan, 2006).

In addition to issues of whether a chain of command should be utilized or a smaller group of local supervisors, it is also still up for debate as to which unit should manage EI systems (Hussey, 2002). That is not to say, however, that only one level of management or even one department, such as Internal Affairs (IA), should shoulder this system alone. In fact, some of the most prominent guides on these systems, such as Samuel Walker's implementation guides (2005a; 2006), frequently reference first-line supervisors as the backbone of analysis in EI instead. This is because these supervisors have the most interaction with officers and would benefit most from additional tools in monitoring them. As it has been mentioned above, many supervisors will already have a notion of which officers may be prone to certain issues and will combine that intuition and expertise with additional information gathered by EI systems. To further this point, consider Walker and Milligan's (2006) concept of *early – early intervention*. In their guide for chief executives, they mention that many in management feel the keen eye of a supervisor is the first defense and that any officer who has not been noticed prior to being flagged by the EI system proposes a weakness in management (p.15).

Due to the fact that the primary responsibility of first-line supervisors should remain as being in contact with their officers, it may be possible to off-load EI system responsibilities to higher levels of management. The reason for this is that many have criticized these systems as taking supervisors out of the field and placing them behind their desks more often. These critics

equate implementation of EI systems as damaging to a supervisor's ability to be in touch with officer behavior. Perhaps a divided control of EI systems may be in order. For example, first-line supervisors could have access to these systems, while at the same time allowing higher levels of management to bear responsibility for them. In this way, first-line supervisors may access the systems should they need to (something which should be stressed by upper management), while also allowing for higher ups to review data and consult with first-line supervisors on officers they may have missed. At the same time, first-line supervisors are tasked with less administrative work which positions EI systems as something which aids them without *any* possibility of keeping them from interacting with officers as well.

Other alternatives may be a shared responsibility between IA, first-line supervisors, and upper-management in an effort to maintain a high level of communication (Bertoia, 2008). Especially since miscommunication has been cited by some as another impediment to proper implementation of these systems (Ikerd & Walker, 2010). By having joint responsibility in these systems, departments may find it easier to navigate issues of informal intervention alongside formal sanction with respect to officer behavior without stigmatizing the EI system itself. As a result information can be fluidly exchanged between first-line supervisors and higher ups, as well as with IA, so that decisions can be made in an effective manner. For instance, perhaps IA can allow certain border line infractions to first be curbed with informal intervention, or likewise, first-line supervisors may elevate a conglomeration of smaller issues to IA if they believe formal sanction is necessary. Due to the closeness of the departments in this manner, the proper decision can be made as needed without any negative reflection on the EI system itself. Otherwise management may be forced to navigate a fine line between what is the jurisdiction of informal

interventions and when formal discipline should instead take their place. One example of such would be an officer reaching a threshold for citizen complaints while at the same time being referred to IA for multiple sustained complaints. Obviously it is the intention of those using EI systems to prevent misconduct by way of intervention but it is plainly seen that there will be cases where an officer is subjected to both the systems' informal intervention and IA's formal discipline. In those cases it would be to the detriment of the EI system if both were to be utilized alongside one another (Walker & Milligan, 2006).

Utilizing Formal or Informal Tracking in Early Intervention

What amount of documentation is kept in the course of these systems must also be discussed. This documentation may either be that data which is collected by the EI system or those files generated during post-intervention monitoring. While the principles of EI systems stress an informal approach to intervention in an attempt to curb behavior, it may be difficult to extend such policies to the entire process. In an entirely informal approach, lacking documentation may diminish the potential of EI systems. For example, Walker and Milligan's (2006) work indicates that some officers have transferred supervisors solely to obtain one who was not aware of previous issues. Officers did this in an attempt to avoid being flagged by the EI system. On the other hand, a more formal method to increase documentation may stray from the intended purposes and goals of the systems altogether. We are confronted with the contradiction of a system which is meant to serve as a data management tool but whose contribution is meant to be completely off the books. This begs the question: to what degree, if any, should documentation begin, and how should that data be used?

When asking how the data should be used, this issue of formal documentation not only poses questions in regard to how these systems will be managed but also speaks to their transparency (Office of Police Integrity [OPI], 2008). The simple answer would be the consensus cited by many who advocate for EI systems: to utilize data so that supervisors may intervene early as needed (e.g., Alpert & Walker, 2000; Walker, 2003; Bertoia, 2008; Arnold, 2001). However, is this data being under-utilized? Documentation may put the public at ease should they have access to such information. Terrill and McCluskey (2002) make mention of such information, instead, opening officers up to liability claims, but this is a view in the minority. On a related note, documentation may actually strengthen EI systems. In Phoenix, the Performance Assessment System (PAS) widely recognized as one of the best in the nation, optimizes its system by making read-only copies of data collected available to each officer (OPI, 2008). This added feature is said to incentivize officers to enact their own self-intervention prior to being identified by the system. In this way they can then modify their behavior as needed to decrease the frequency of instances which would otherwise suggest their need for intervention.

Other uses for documentation can be shown by Luna and Walker's (1997) work, which proposed systems similar to those utilized by the Minneapolis Police Department. There, information is published in regard to regions experiencing higher officer complaints, but withhold individual identification. This individualized data is still collected but only provided to relevant supervisors who are then able to administer informal intervention. Again, the data collected by the EI system is optimized to serve multiple functions outside of early intervention, such as being transparent to the public. In fact, many who propose documentation as a weakness to EI systems are not wholly against it. Those who do raise objections can be found referencing systems relying

in large part on citizen complaint data (McCluskey & Terrill, 2005). Critics here fear that officers may experience negative stigma and/or repercussions for complaints which later go unsubstantiated. Regardless, creative outlets of data already being collected must continue to be explored. When controlled in the proper ways, documentation may serve a purpose which is of no detriment to police agencies or officers, while at the same time aiding organizational goals by making the intervention system even more effective.

Another type of documentation outside of data collected by the system is that which is created during post-intervention monitoring. Walker, Alpert, and Kenny (2001) offer insight on the issue when they state nearly 90 percent of agencies utilizing EI systems monitor officer performance after an initial intervention. Paoline et al. (2015) also found this same figure of 90% with respect to post-intervention monitoring which they further distinguished between the 40% whose monitoring lasted 12 months and 47% lasting 36 months. As of yet there remains no clear standard on whether such monitoring should rely on informal methods or formal mechanisms of observation and documentation (p. 2). This is because Walker (2005b) also advocates secrecy as a strength of EI systems which would imply any type of documentation kept would violate core principles of them. He states "No formal records of the content of an intervention – what an officer says, any recommendation for professional counseling – is maintained" (p. 104). This is reiterated by Alpert and Walker (2000), when citing the extreme variations which exist in post-intervention monitoring as either highly formal or highly informal (p. 148).

When these systems do maintain a more informal stance during this process they are allowed the necessary pre-requisites to explore even those matters which plague officer behavior due to reasons personal to the officer such as financial struggles. However, as stated above, there

is no norm on how documentation should be used in these situations. New Orleans and its Professional Performance Enhancement Program (PPEP) has supervisors observe those officers subject to intervention on a regular basis and file formal evaluations every two weeks for 6 months (Andre, 2007). In contrast to the PPEP, the PAS in Pittsburg requires sergeants to conduct "roll-bys" on a continual basis after an intervention (Andre, 2007). Thus no official documentation exists. Further, Western Australia's intervention system lies somewhere in the middle enacting a relativist model where formality and duration of post-intervention monitoring, as well as level of documentation, is determined on a case by case basis (OPI, 2008).

As documentation does progress, however, larger needs for storage of those files will arise too. Whether that storage is created electronically or hard-copy, it must be considered how long any one file will be kept on record. While it would be ideal to encapsulate an entire officer's career on file until the day she/he retires, this may not be cost-effective or even necessary in larger departments. For instance, with other systems of formal discipline, even record of citizen complaints, when unfounded, are only held on file for a specified span of time (Emmanuel, 2010). Whether or not documents will be kept on file on a rolling basis (as thresholds expire and reset) or will be kept for the life of the officer's employment is another decision each implementing agency will have to make. For those who choose the latter, they may incur higher costs both for implementation of systems which can handle higher levels of paperwork or will require more time to organize and store files as needed by personnel.

Local vs. Centralized Management

Although secondary review, discussed earlier, touched briefly on the issue of management personnel and their relationship with EI systems, this section explores management's role over the

entirety of processes related to EI systems. How, and in what ways, managers will be able to interact with both system data and officers is an important consideration (Walker et al., 2001). Poor organization here can fail to empower the necessary supervisors or create miscommunications which ultimately result in a failure to intervene or a lapse in ensuring that an intervention creates a significant change in an officer. At the same time, how portions of EI systems are split within high-command and first-line supervisors also affects their success. The term "localized management" used here will refer to first-line supervisors whereas "centralized management" is referring to those supervisors higher up in the chain of command. Bertoia (2008) explains that "the key feature of the suggested management structure involves the separation of three main phases in the EI System: identification, intervention, and monitoring" (p. 24). For instance, localized management may be more reliable when determining what intervention an officer would benefit most from but fail in be objective in monitoring that officer's progress with the intervention. In this way, perhaps optimal organization would ensure localized management oversee the implementation of officer intervention, but centralized command to then be the one to later monitor said officer's progress. On the other hand, localized management may not be the most objective when flagging officers who seem to need intervention, as Walker and Milligan (2006) have found. They cite instances of officers simply adapting their style of policing to that of their supervisor in an attempt to not be flagged.

The literature suggests that a buy-in is required by all personnel, but there are still mixed reviews on whether a hybrid approach, as far as management, should be taken (Bertoia, 2008). With a hybrid system of management, the workload may be split between localized and centralized management so that first-line supervisors are not required to notate, intervene with, and follow up

with every officer. Instead varying tasks are assigned to the individual levels. However, issues here can include disparities in management philosophies, inequality in enforcement and treatment, and inconsistencies in how the system is utilized. Should a singular approach be taken, we are still faced with issues of accountability among management and communication if an officer were to transfer departments or supervisors.

Additional Considerations Needing Examination and Forethought

The Costs of Early Intervention

When speaking on the effectiveness of any program's implementation, it is wise to keep price in mind. No benefit is justified if the means of obtaining it are both inefficient and costly. The Office of Police Integrity (2008) estimates costs of EI systems as high as $25,000 for those departments which are 750 to 1000 employees strong. These figures increase with their additional estimates on training and installation at $1,200 per day; not to mention the time it takes for the systems creation (p. 14-15). The PAS in Phoenix, discussed earlier, is estimated to have cost up to $375,000. These costs are incurred to obtain customizable software created expressly for EI systems such as IAPro. To elaborate, IAPro is a software which allows police administration to sift through and analyze data within their systems. Traditionally, as the name implies, these systems were utilized by IA departments. However, they have increasingly evolved to include EI capabilities such as customer-configurable thresholds, peer group analysis, and the like (CI Technologies, 2007).

Despite the above numbers, however, the authors confidently claim that the system is a cost-effective program in light of the performance improvements it sponsors and instances of civil suits it prevents (OPI, 2008). However, for smaller departments that may have limited budgets, there are a number of other possibilities to mitigate costs. For example, options in the realm of software include what the International Association of Chiefs of Police (IACP) has termed *commercial off-the-shelf* (COT) systems (IACP, 2006). Just as departments may mimic ways others have implemented EI systems, they may too mimic the system itself. Although certain changes will have to be made to tailor the system to their particular department, these

COT systems allow departments to begin with a prototype. Once taken the department can then make changes as necessary without having to start from scratch. They are also able to avoid purchasing customized software packages like IAPro. The IACP does caution readers when stating that few COT systems exist, but also promote this notion of being creative when implementing EI systems and stressing utilization of resources which may drive down costs of implementation (IACP, 2006, p.49-81).

In another manner, departments may instead tweak existing data collection systems to allow them to complete the base function of any computerized EI system: tracking officer indicators. In this way the department is able to retain computerized data systems without large installation costs. A conglomeration of existing data collection systems such as this, theoretically, can flawlessly and seamlessly compile data from several collection points into actionable data which can be reviewed for behavioral trends in both officers and departments. As a conglomerate, the new system makes use of existing processes and data to act as a data management tool. One example is the Los Angeles Police Department (LAPD) who integrated 13 existing data collection systems to do just that. From this the LAPD was able to create their own risk management system which would be used to guide their EI practices. Not only did this system integrate the existing data already collected, but allowed for the many automated processes such as automatic flags discussed above (Sierra-Cedar, 2003). However, all of these systems may not have the added convenience of automatically flagging officers based on certain thresholds. Nonetheless, they can still aid as a tool to lighten the administrative work of any supervisor. As a result, the supervisor acts more as an evaluating agent rather than a data entry authority.

Another means of mitigating costs may be to create systems which are less comprehensive. Regardless of whether they are computerized or not, systems may collect a smaller variety of indicators shrinking all aspects of implementation – training, administrative changes, and the like. Walker (2005b) even typifies this aspect of EI systems into two variations: large comprehensive systems, and smaller more manageable ones. He terms the lesser *Performance Problem Systems*. Although these have more limited capabilities, according to Walker (2005b), they excel in creating more manageable costs for smaller departments who have no need for a large, comprehensive system.

Existing Departmental Resources

Brief mention must also be made about existing resources departments may be overlooking in their mission to implement these systems absent high costs or sweeping departmental changes. Simply put, analyst personnel in departments have had a long history of aiding departments in operating efficiently. However, few departments have yet to capitalize on such expertise. An expertise which has long been in charge of predictive analyses for how officers are stationed, how crime prone an area may be, and even solving cases with few leads (IBM, 2013). Yet, we see little implementation of this expertise and its transfer to the creation of EI systems; especially considering the only real tangible change is that the target of analyses for these individuals transitions from the criminal to the officer. While it must be admitted that the system capabilities generated by these personnel may pale in comparison to comprehensive software produced by large tech companies, it can at least be offered for a start. Even if only serving as a solid footing and idea cloud for future system launches.

Logistical Considerations Expanded

Planning and implementation of EI systems has been continuously stressed during the growth of these systems' use. It is for this very reason that recommendations have been made to consult outside agencies, departments who have previously implemented the systems, and experts on the subject (Gibbs, & Kendrick, 2011). The concept of an EI system itself is not a difficult one to grasp and, on its face, appeals to a very common sense approach to managing a department (Walker, 2005b). As it has been explored above, the reigning philosophy is to create a proactive and involved stance on proper conduct. Actual logistics of these systems, on the other hand, can be difficult to navigate. Especially so as current research is still attempting to work out the finer details of them.

Moving beyond the initial decisions of indicators and thresholds as well as each rank's responsibility within the system there still remains additional considerations. Many of them beg the question: what will this system actually look like? A handful of EI system software programs exist on the market today, such as BlueOrder, IA Trak, IAPRO/BLUETEAM, and Administrative Investigations Management (Stevens, 2009, p. 511). Some previously existed as internal affairs systems, now updated to have EI capabilities, while others have been created expressly for EI. For example, IA Trak mainly exists as an IA tool but now includes alerts which can be set to notify supervisors based on some preset threshold (Police Trak Systems, 2016). BLUETEAM, conversely, has been built with the exact intention of being utilized as an early intervention system (CI Technologies, 2007). As a result, it has additional features such as distinguishable data elements within each indicator being measured (i.e. less than lethal force designation in use of

force), peer-group analysis features, and an ability to collect more information overall (CI Technologies, 2007).

Should a department wish to implement an electronic EI system, determining which is best may prove difficult. As examined above, more comprehensive systems can come with a lofty price tag. However, upgrading to a less-than-capable system can prove just as costly if no benefit is gained. This may even lead to negative sentiments among departmental staff as observed in an article covering Cleveland Police's transition to an automated system. As Jeff Follmer, president of the Cleveland Police Patrolmen's Association, states "This software is a joke. Officers know how to reach out and get help. Why do we need a database or some outside tech group? What we need are more cars and equipment that will help us do our job" (Atassi, 2014, p. 2).

Logistically, a department must decide at what point there will be an intersection of the following things: needs, price, effectiveness, and workload. If a department chooses to keep hand-written records it may successfully implement an EI system absent large technological costs but at the sacrifice of personnel workload. Alternatively, if a department is to utilize a more comprehensive system it will have to bear that cost. Failure to make the right decisions as to where each line will be drawn can result in too high a price for recovery (via the benefits of the system), too high a workload for adoption of the system, or too incapable a system for success and continued buy-in. Moore (2003), in his work, demonstrates just this when outlining varying strategies the San Jose Police Department might adopt ranging from "Ad Hoc Supervisions Models" to a more comprehensive "Personnel Performance Database Model" (p. 43-49). Within each class he discusses both strengths and weaknesses with regard to their price, sustainability, effectiveness, and short or long-sightedness. Overall, he makes the point that what may be viewed initially as a

concession in terms of price, might truly be the wiser choice as opposed to implementing a short-sighted program or an incapable one.

Again, implementing an EI system is not totally reliant on computerized software. Hussey (2002) echoes this point when he states that these systems can succeed with or without computerized systems, but that they do allow for the benefit of supervisors to be able to access large volumes of organized data (p. 54). If the processes of supervisory staff are modified to accommodate EI practices then analysis of data may be mainly absorbed by personnel lessening a need for comprehensive software. However, the increased workload for management staff may create a loss of interaction with subordinates discussed previously. At the same time, as EI systems continue to mature they will become increasingly complex. This would imply that at some point EI systems will require a larger need for electronic processes (Hussey, 2002). That need may even escalate to technology becoming a prerequisite of them.

If computerized software does not continue to become more sophisticated at a smaller price point we may see a decline in the adoption of these systems. Unfortunately, many technology companies require the endorsement of law enforcement agencies to even earn a *badge of honor*, so to speak, just to be entertained as a marketable software. For example, Thomas (2002) published an article in the Wall Street Journal covering a technology company experiencing just that. In it he wrote how Angela Butler's software firm nearly suffered bankruptcy as she personally financed overhead costs of the company in an effort to maintain a contract for the successful implementation of software needed by the Pittsburg Police for EI. Only after receiving that departments' endorsement was she able to market the software to other agencies implementing EI systems effectively. There is a possibility then, that a handful of technology companies will slowly

monopolize the market on EI software while at the same time only filling those needs with previously created programs that have been updated to be marketable as such (with new EI interfaces). The point is, if the nexus of logistical factors mentioned above shifts, due to increases in needs, existing software may make an intersection of them nearly impossible as either too expensive or too incapable.

Technology companies should have a vested interest in maintaining their market with police agencies and it will be up to the leaders of those agencies to ensure said companies are creating the most effective systems at the lowest cost. The current inefficiencies of existing software may be the result of a trickle-down effect of the non-consensus of the particulars of EI systems; something crucial to any software design (Walker, 2007). As it is known, increased research on these systems are needed. However, it should be distinguished that establishing the efficacy of these systems is not the only priority. Those studies which will give more concrete answers to best practices such as a go-to list of indicators, effective ways of setting thresholds, optimal management, and intervention strategies and follow ups are just as crucial. Unfortunately, information toward those concerns just listed are either sparse or scattered between unconnected case studies. At the same time, it is that type of information that will later drive the efficacy and sound implementation of these systems both from a technological standpoint and organizational one.

Guiding Future Research

Why Have More Systems Not Been Implemented?

EI systems have been listed as a best practice and highly effective both in case studies and by renowned organizations (e.g., U.S. Department of Justice [USDOJ], 2001; IACP 2006:09; Langworthy, 1999; Walker, 2003). Why is it, then, that a study conducted by LEMAS as recent as 2007 surveying 883 departments remarked only 39% reported they utilized an EI system (Bureau of Justice Statistics [BJS], 2007)? Four reasons might be posited:

- The agency believes it is not needed (due to size or their confidence in their ability to monitor officers traditionally)

- The agency believes it is too costly

- The agency is awaiting evidence of the systems efficacy elsewhere

- The agency defined its EI system differently than the survey or only utilized practices of EI systems without a formal system in place

Sharback's (2015) research indirectly disputes the first. While it is known that larger departments may benefit from, or have a larger need for, EI systems, the data shown between departments which implemented EI systems between 2003 and 2007 grew in all three department size brackets (100-249 officers, 250-499 officers, and 500 plus officers). Percentage increases were 25%-33%, 41%-59% and 57%-73% respectively. At the very least, the organizations included in his research suggest that the size of their department is not always a central concern when deciding to pass on implementing an EI system. The next, cost, has already been discussed in this manuscript at length. It has been shown that departments have many options to find a system which might work at a price they can afford. Any unwillingness to implement the system based in cost alone is most likely

being factored into a larger calculus of need and benefit. If an agency is serious about utilizing this system, they have begun the conversation, and cost is something which can be considered throughout that decision making process as needed. If the agency is awaiting an establishment of efficacy the same argument applies: many sources exist which identify instances of success, failure, and best practices which will grow possibility of the first. Of the hesitations listed here it is most likely a belief that the system is not needed which impedes implementation. This may be due to issues of feasibility, complications in implementation discouraging management personnel, or just an overall hands-off approach as supervisors maintain traditional methods of oversight and job performance. To those, EI systems represent a program that is not needed if supervisors are performing effectively. Unfortunately, and at the risk of being repetitive, it will be up to researchers in the field to substantiate the need and benefits of these systems so that it can then move forward to improving and enlarging them.

How Might These Systems Grow?

Those in opposition of EI systems as something unnecessary or as accomplished by existing protocol already are not completely mistaken. However, as other components of policing continue to evolve as we have seen, EI systems have been established by researchers as the new era of police accountability. These systems have a large potential which has been recognized by many prominent groups in the criminal justice world (e.g., USDOJ, 2001; IACP, 2006:09). Many scholars take a cautionary approach when hearing the word "potential". However, if a standardized and systematic approach to creating these systems manifests, their implementation can surely pave the way for future reform (Walker, 2005b). As consensus and research on them grows, researchers will be able to use EI systems as a vehicle not only to monitor officer behavior but also as a research

tool, a source of consultation for policy, and any other number of things which could be based on the data collected by these systems, data which will continue to expand as the systems evolve. As a system which will continue to track officer behavior based on certain indicators, it can be said that long-term data on a department's progress towards fewer complaints, fewer incidents of excessive force, and the like will be able to be tracked. For departments who are able to keep officer data on file long-term we may be given even more insight into officer behavior, whether it be specific to a department, region, or the United States as a whole. As a result we may see this data guide more than simply localized management in curbing officer behavior and evolve to changes in policy. While this is much farther off, and will depend on how popular and standard these systems become, it is not impossible.

EI systems could be the gateway that allows departments of review and risk management, such as Internal Affairs, to begin to operate more proactively. Further, the system could lend to improving existing investigative policy when it comes to police misconduct, and over time close loop holes in more formal aspects of police discipline to reform training and disciplinary action to new levels of effectiveness. This is because the system is meant to detect trends in behavior as a means of proactively addressing degenerative behaviors or weakened performance. In this way, the system may also, separately, sponsor other formal aspects of police discipline to create more pointed punishments (for actual departmental policy) based on violations incurred or more comprehensive training so that officers going into the field are less apt to such deficiencies identified by EI systems. However, it should be cautioned that while the systems use may lend to such things the connection should not become so transparent that it sponsors a feeling of animosity towards it. At such a point the initiative would be relegated to a point of mistrust, such as *big*

brother is watching, and no longer serve its initial purpose of an informal means of sponsoring better performance among officers.

The Utility of EI Systems

The utility of EI systems seems to be the golden question. As a result, many have set out on trying to delineate the efficacy of EI systems and how they are being implemented – whether it is to the department's credit or just another reform with mixed results. Based on extant research reviewed above it is clear that when these systems are implemented effectively and are organized as needed they do well to assist in mitigating police misconduct or other failures (Walker, 2003; Atassi, 2014; Bertoia, 2008; Fields, 2010; Gibbs & Kendrick, 2011; Moore, 2003; OPI, 2008; Sharback, 2015; USDOJ, 2001; Stephens 2011; Andre, 2007). However, it is unlikely that these systems will prevent every aspect of negative police behavior. In fact, given the nature of the police profession such instances will still occur. One example of such may be the many split-second decisions that are made on any given day which are unable to be regulated wholly. Where these systems will likely be most effective is preventing those negative interactions which take place as a result of a deficiency in an officer's mental and emotional state or lacking professionalism. However, for those officers that act out of character due to a flashpoint event, failure in judgement, or some other outside aspect affecting their behavior, EI systems may not always be able to prevent such.

Based on research thus far, however, these systems can very well usher in the new era of policing and help facilitate a new paradigm of police reform. As policing continues to evolve, departments will, ideally, become even more technological with aids such as body cameras,

biofeedback monitoring, and the like. With technology like that at their disposal, EI systems may serve as a computerized foundation. Were these systems to evolve to a level of technological prowess that they could essentially predict officer behavior in seconds and become 24/7 monitors, we may see them grow to a point where nearly any act of excessive force (or inappropriate behavior) can be eliminated. Mark Fields (2010), a California Highway Patrol officer, describes just this future, when making reference to developing technologies such as Global Positioning Satellite (GPS) monitoring systems outfitted on law enforcement vehicles as well as *Smart Shirts* which can monitor a person's vital signs – breathing, heart rate, and blood pressure. Perhaps future departments, having already implemented EI systems, will see their capabilities grow to a point where they can also integrate data from these types of technologies as well. Ideally, this might result in real time threat prevention for officer misconduct. What was originally a system flag generated by multiple vehicle collisions would now evolve to the system linking a history of poor driving of a particular officer with real time data being collected by the GPS system outfitted on his squad car. As a result, supervisors would be able to immediately contact him/her and question why he/she is acting as such and may even prevent some error in judgement. Granted this is a very futuristic view on EI systems, it is these types of creative visions that will allow EI systems to begin as a functional system and evolve into risk management systems that may go unrivaled.

The utility of these systems have been proven qualitatively on certain case by case basis – and yet research has still not reached a consensus on their overall credibility. However, what should also be remembered is the potential of these systems. Thus, despite hesitations about whether they are truly effective or not, given that there have been departments to integrate them with certain success, it should be known that it is possible. Once this matter is settled, we can begin

looking at the future of these systems and begin to realize just how much potential they can have as discussed above. Lastly, it is unclear whether comprehensive study of these systems will be wholly possible. While research would do well to explore the amount of systems which result in success, it is questionable if large-scale comprehensive study of these systems can effectively take place. This is primarily because comparing each will be difficult as the systems are meant to be created in ways unique to each department and in consideration of the department's size, needs, and relevant criteria for assessing officer behavior. Further, budgets relative to each department are what determines how comprehensive or selective a system may be. Thus, without the aid of qualifications or standards to typify varying systems, it will be difficult to discern commonalities among them other than a general level of effectiveness experienced by departments across the board.

Concluding Remarks

The aim of this thesis has been to provide insight into what EI systems are, how they function, and how they have manifested in departments thus far. The main components of them have been discussed: indicators, thresholds, interventions, review strategies, and post-intervention follow ups. There is still much to be established in how these systems will operate and it is the burden of researchers in the field to deliver on this front. As a system which continues to stand on a mountain of potential, the current lag in research may partially inhibit their implementation. However, if criminal justice leaders (based on available research) are able to reach a consensus on how these systems will be implemented, demand standardization of the indicators, thresholds, evaluation processes, and interventions used within them, as well as the policies surrounding each, and ensure that technological solutions are available and cost-effective, little will stop these systems from evolving to even larger capabilities.

To elaborate, indicators must be firmly established; no longer can we simply evaluate the ones in existence. Instead they must be carved out by traditional methods of predictive research and increased scrutiny of how they might be measured as well as their potential limitations. Opportunities exist in both forward and reverse engineering principles for these measures of police behaviors. A balance must be struck between these indicators' effectiveness and their limitations. Whether this is an issue which will be solved with more comprehensive lists of indicators or more intricate ways of measuring them is yet to be seen.

In addition, the thresholds used in conjunction with those indicators will need to be realistic and conducive to them. They can no longer simply rely on the data but must instead contribute ways in which it might be statistically analyzed for accuracy and timeliness. Frequency and tally

based thresholds are out of date and impede an optimal EI system. Alternatives within thresholds do exist and the more complex they become the more analysis will be available to the supervisors monitoring them. These thresholds must be open to interpretation and allow for flexibility in so far as an analysis of data. Again, frequency and tally based thresholds do not currently allow for such. Better technological solutions may serve in aiding this venture.

To expand on the above, technologies aiding these systems need to become more affordable as well as more capable. They will eventually be needed to sponsor the future success of EI systems, especially as these systems become more complex. If the computerized tools at supervisors and managements disposal have limited capabilities the functionality of indicators and thresholds may be lost. Computerized systems can function as huge productivity boosters to these systems but must improve their own capabilities and cost-effectiveness. It must also be decided, perhaps respective to each department, what supervisors will assume which tasks and which combination of them would be most efficient or helpful. It will be the responsibility of supervisors and managers to conduct their analyses in ways which use the collected data in as many ways as possible to forward not only increased accountability but any other aspect that data may lend itself to: better training, better supervision, and better discipline.

As review and selection processes are streamlined and improved, questions regarding which interventions should be used and which are most effective will become even more important than they already are. It is key that a focus here is not neglected as the interventions will largely underscore the relative success of these programs. Even if officers are flagged early and appropriately, it will do no good should they not receive the proper rehabilitative treatments. Post-intervention follow ups may hold the solution to ensuring proper intervention techniques and

practices. However, how and how long these periods of observation will be conducted are still being decided and are, currently, at the discretion of each implementing department. An increased specificity here may aid the system in not misappropriating personnel time or concern if it is shown how long an intervention need to be monitored before it can be deemed successful or in need of change.

Overall, consistency in the views and perspectives of the systems have to be reached. This may even result in researchers, for a time, being unable to say with certainty that particular indicators or processes are completely correct in predicting negative officer behavior. While this may result in unnecessary flags or interventions, as long as there remains an overall commitment to maintain accurate predictions, departments will be able to remedy those as they occur. At the end of the day the initiative has always remained the same: to be proactive in identifying risks and or negative behavior among officers. Even if certain indicators are weaker than others, if the system as a whole operate sufficiently and gets the job done, which equates to preventing officer violence or excessive use of force, then the initiative has been successful regardless of certain shortcomings in data. It is important that we prioritize beyond the smaller issues so that consistency can be established and the systems can be implemented. Once this is been done they can, again and again, be reformed and refined as needed to include better indicators, removal of weak indicators, and anything of the like.

EI systems and their related principles make complete sense, they sponsor a common sense appeal – it is their need for increased research, specificity, and unified policy that is currently inhibiting their potential and implementation nationwide. The hang ups which continue to stop their spread will rely on researchers to move toward establishing defined practices, definitions,

and materials with regard to EI systems and their implementation. If all of this can be achieved, with time and effort, we may begin to see one of the largest revolutions in policing accountability. A change which will be able to grow with future reforms and serve as the necessary foundation to bring about real and measurable change in officer accountability and behavior for years to come. It is time to recognize EI systems as the credible and effective opportunity that they are.

Appendix A

Appendix A: Indicators Utilized in EI Systems

1. Arrest/Discretionary arrest codes
   a. Number and types of arrest
   b. Amount of resisting arrest charges
   c. Amount of obstruction or assault on officer charges
2. Sick Leave/Vacation time
   a. Excessive sick leave or abuse of sick time
   b. Sick time contiguous with vacation time
   c. Excessive absenteeism during holidays
   d. Amount of tardy days
   e. Other absences or discretionary time off
3. Complaints
   a. Petty theft complaints by merchants
   b. Allegations of sexual overtures
   c. Allegations of misconduct (sustained or otherwise)
   d. Prisoner complaints (during transport)
   e. Inability to work with co-workers
4. Performance and Discipline History
   a. On-going poor performance
   b. Deficiencies in report writing
   c. Ignorance of basic law
   d. Cases not filed due to err in policing
   e. Principle participant in incident
   f. Missed court dates
   g. Considerations and awards (including citizen initiated compliments)
5. Use of force
   a. Number of incidences
   b. Type of force used (may be compared to previous years, resistance experienced, or levels of arrest activity)
6. Motor Vehicle Accident/Damage
   a. Seriousness of damage
   b. Action leading to damage (pursuit vs. traffic infraction)
   c. Number of vehicle pursuits
7. Excessive Over Time or Off-Duty
   a. Financial issues
   b. Garnishments on wages
8. Officer Involved Shootings or Discharges
9. Citations Written
   a. Traffic and criminal

10. Inappropriate or Unusual Behavior
      a.   Unnecessary risk taking
      b.   Poor language or conduct
      c.   Poor use of display of weapon
11. Secondary Employment
12. Training History and Firearm Qualifications
13. Excessive Use of Alcohol/Drugs
14. Assignment History

Appendix B

Appendix B: Map of Orlando Police Districts and Sectors

City of Orlando
POLICE DISTRICTS, SECTORS
AND DIVISIONS MAP
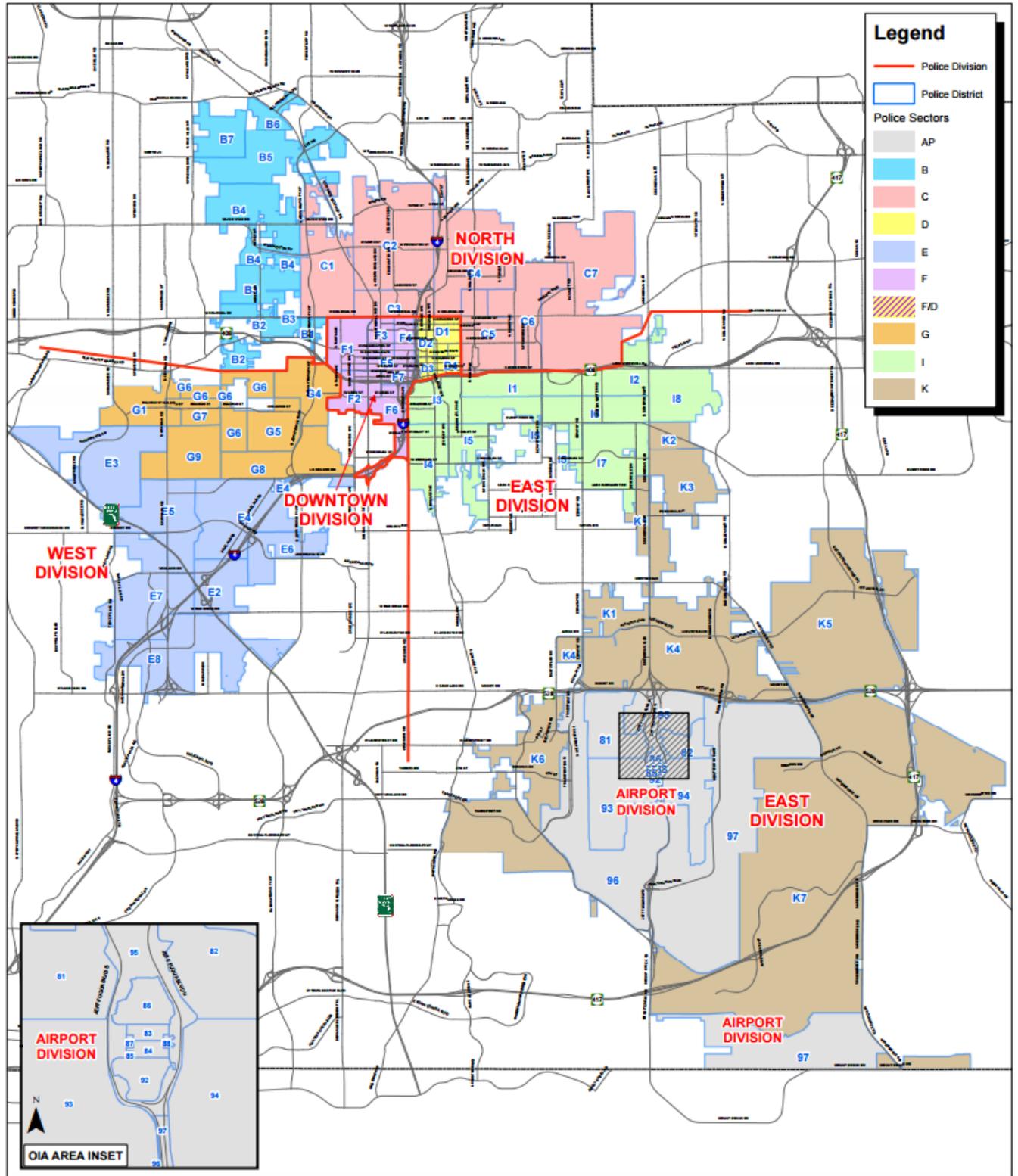
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